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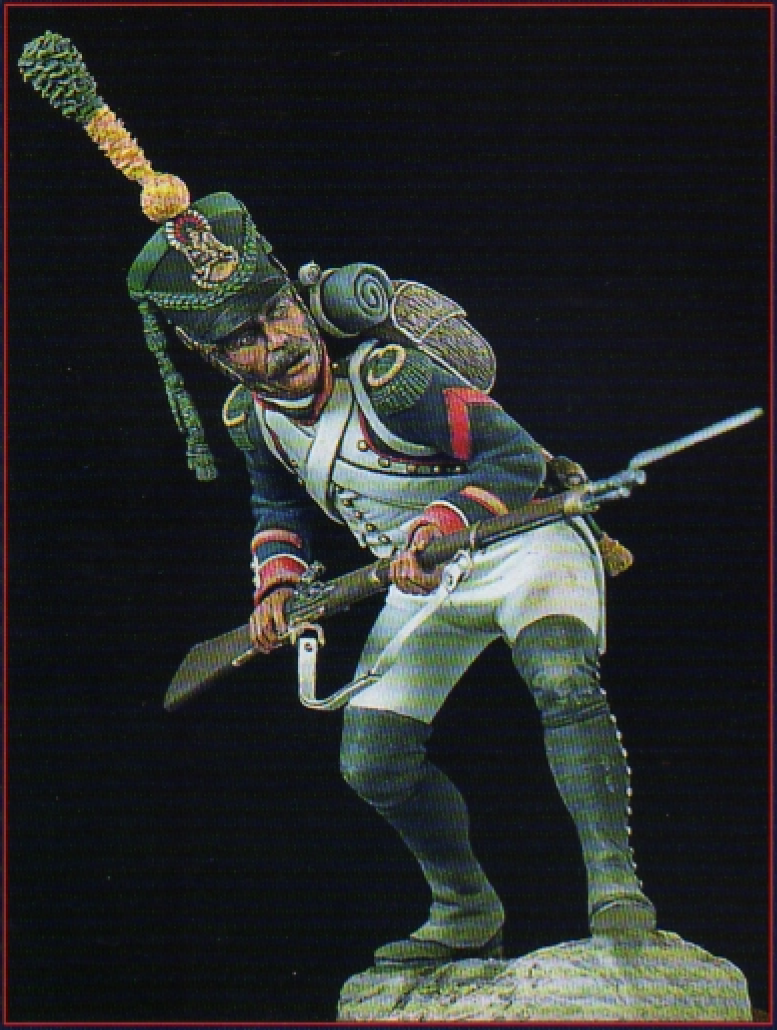

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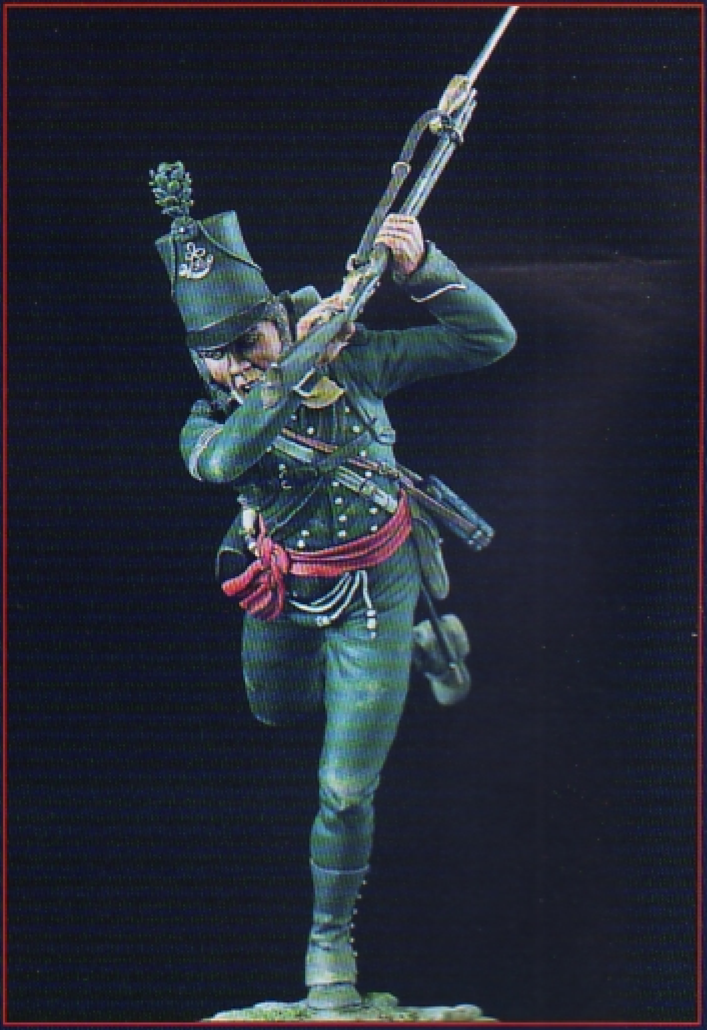

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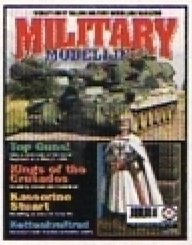

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Vol.28 No.8 1998

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ABOVE: Steve Zaloga's early war M3 Stuart Light Tank with the markings of a US Army example in action at Kasserine Pass.
RIGHT: Verlinden Productions' 120mm Super Scale 8th Army Desert Rat converted to a Gordon Highlander c.1908.

COVER: The British Army's AS-90 Self Propelled Gun is the subject of this month's photo feature, first of a two part article, beginning on page 24. Soldiers de Lucchetti's figure of Barbarossa painted by Mike Blank. See feature beginning on page 22.

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INFORMATION / DIARY DATES

Red Army

The 2nd Guards Rifle Division (Red Army) is a living history Society whose members are dedicated to representing an accurate portrayal of the men and women who served with the Red Army during the Second World War. The club is non-profit making and although they portray an army that was largely communist, they have no political affiliations and no political activity is allowed.

Club members take part in static uniform and living history displays at various military shows. They use as many authentic items of uniform and equipment as possible. To be historically correct, the club actively encourages women to join their ranks. Members receive a newsletter every two months outlining show dates and containing articles about the Red Army of World War II.

If you are interested in the Red Army during World War II and would like to become a member of the 2nd Guards Division, please contact the Membership Secretary, 21 Elsing Close, Meadow Rise, Newcastle Upon Tyne NE5 4SW, enclosing a SAE. Any groups or organisations interested in booking the 2nd Guards division for weekend displays are welcome to write to the above address.

Change of Address

The Miniature A.F.V. Association have a new address. Contact the President, Gary Williams at 45 Balmoral Drive, Holmes Chapel, Cheshire CW4 7JQ. Tel. 01477 535373. Fax 01477 535892. e-mail: MAFVAHQ@aol.com

Roberto Marino

Would Roberto Marino who submitted the article on modelling a 5th N.Y. Zouave please send the Editor his full address.

Exhibition and Model Competition

The Guernsey Plastic Modellers Group will be holding an exhibition and model competition on Bank Holiday Monday 31st August. This will be held in the Forest Methodist Church Hall, and is open for entries from 10am until 11.45am. Viewing is from 12 noon until 5.30pm. Visitors to the Island are welcome to enter, but please note they have no facilities for returning any items posted, all entries must be delivered and collected in person. For further details please contact Dave Nash on 01481 724001.

Model Spectacular 3

Sutton Coldfield Model Makers Society's 'Model Spectacular 3', will be held once again in Sutton Coldfield Town Hall on Sunday 20th September. It will see clubs and traders from the length and breadth of the country converging to help show the public just what it is that makes model-making such a fascinating pastime.

Society Chairman, Steve Yates, said: "Last year, the question we were asked most was, can we come next year? We are pleased to tell everyone, yes!. Our reputation for running a show that is at the same time both business-like and friendly is becoming well-known, and we are confident that visitors, clubs and traders will have a splendid time. Once again, it promises to be a truly Spectacular show".

Society Vice-Chairman and Secretary, Robert Day, added: "The support from the model trade, manufacturers, clubs and the general public made last year's Model Spectacular the best so far. We are looking forward to sharing this year's show with friends old and new from the modelling fraternity, and offering before anything else good company and a friendly welcome".

Visiting modellers will have the opportunity of entering their own models in an open competition. Amongst the awards to be competed for will be the George Canning Memorial Trophy, in memory of the former Lord Mayor of Birmingham, who was a member of the club.

Model Show and Competition

The Aero Space and Vehicle Club are holding their Model Show and Competition on the 6th September at the Community Centre, Church Road, Wombourne, between 10.30am and 4.30pm. For further details contact J. Van-Leerzem, 163 Bells Lane, Stourbridge, West Midlands DY8 5DS.

War and Peace Show

The Invicta Military Vehicle Preservation Society will present the War and Peace Show on 17th to 19th July, at the Hop Farm Country Park, Beltring, Nr. Paddock Wood, Kent. This will feature over 2,250 military vehicles from WWI to the present; over 250,000 square feet of militaria and collectibles; a militaria model marquee featuring displays, competition and stalls; arena events throughout the day; tanks crushing cars and helicopter and tank rides; happy hopper indoor adventure playground; plus all he attractions of the Hop Farm Country Park. Camping facilities are also available, but for local accommodation contact The Tourist Office on 01732 770929. Admission charges are: Friday and Saturday - adult £5, Children and OAPs £3. Sunday - adult £6 and children and OAP's £4. For further information contact Rex Cadman, The Old Rectory, Sandwich Road, Ash, Nr. Canterbury, Kent. Tel: 01304 813128. Fax: 01304 812422.

North East Modelling Society

The North East Modelling Society will be holding their Open event at Hartlepool Borough Hall on the 25th and 26th July. Visitors to Hartlepool can see ancient and modern standing virtually side by side. Combine the wealth of history at Hartlepool's Headland, location of the Borough Hall, with a trip to Hartlepool's Historic Quay, a spectacular themed attraction which recreates the life of a naval seaport in Victorian times, the multi-award-winning Museum of Hartlepool, voted most popular new attraction in England by the English Tourist Board, and Jackson's Landing, the North East's first factory shopping mall.

The Scale Model Open is organised jointly by Hartlepool Borough Council and NEMS and is designed to appeal to a wide cross-section of the modelling fraternity with its mixture of club displays, trade stands and competition classes. Enquiries should be directed to Len Swaisland, NEMS Secretary, 6 Jude Place, Peterlee, County Durham SR8 5JW. Tel: 0191 586 7139.

Manchester Toy Soldier Collectors Society

The Manchester Toy Soldier Collectors' Society meet on the last Saturday of every month between 1pm and 4pm at the Sir Ralph Abbercromby, Bootle Street, Manchester. Admission is free. For further details please contact Phil Jones, tel: 0161 228 9021, evenings only.

Welton Mini-Ship Collectors Fair

The Welton Mini-Ship Collectors Fair takes place on Sunday 26th July in the Welton Village Hall, Ryland Road, Welton, Lincoln, and will be open from 10.30am until 3pm. There will be a wide variety of stalls, both model dealers and also some of a more general nautical nature. Further details can be obtained from Tim Hudson, 52 Long Leys Road, Lincoln LN1 1DR or tel: 01522 524672. E-mail: photrek@hh-assts.demon.co.uk

Annual Model Show and Competition

The Sunderland Scale Model Club will hold their Annual Model Show and Competition on Sunday 13th September, at the Nissan Social Club and Sports Hall on the outskirts of Washington, Tyne and Wear, between 10am and 4pm. The new well-lit venue offers plenty of space and easy access for traders, clubs and visitors. There is an enormous car park and refreshments will be on sale all day. For further details please contact Dennis Walton, tel: 0191 548 0744.

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Military Modelling is now published every four weeks and throughout this year there will be an extra SIX Special Issues of your favourite magazine to look out for. Keep an eye on this 'NEXT ISSUE' panel in each magazine for the publication date of the next one in line.
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- **The next Military Modelling magazine is another 'Special Issue' a photo album of the uniforms of the present day British Army. The Army is undergoing many cuts in manpower and equipment and its regiments are being amalgamated or are disappearing forever!**
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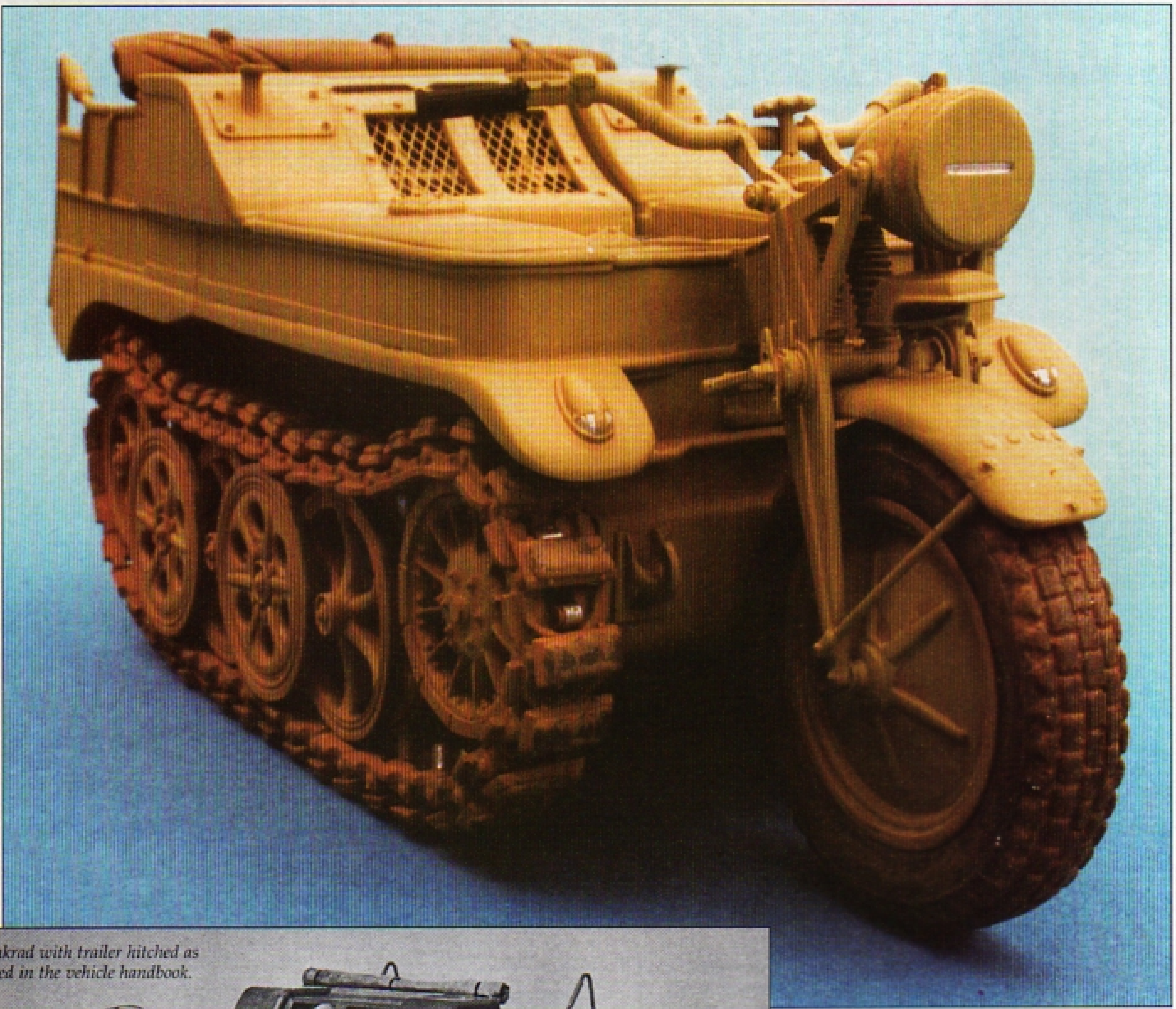
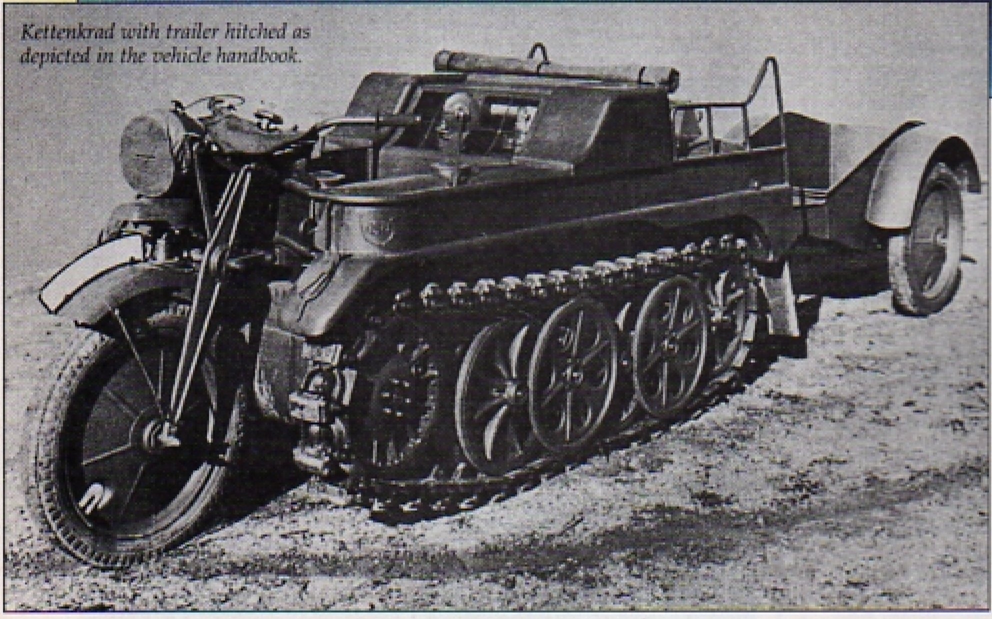




Kettenkrad with trailer hitched as depicted in the vehicle handbook.

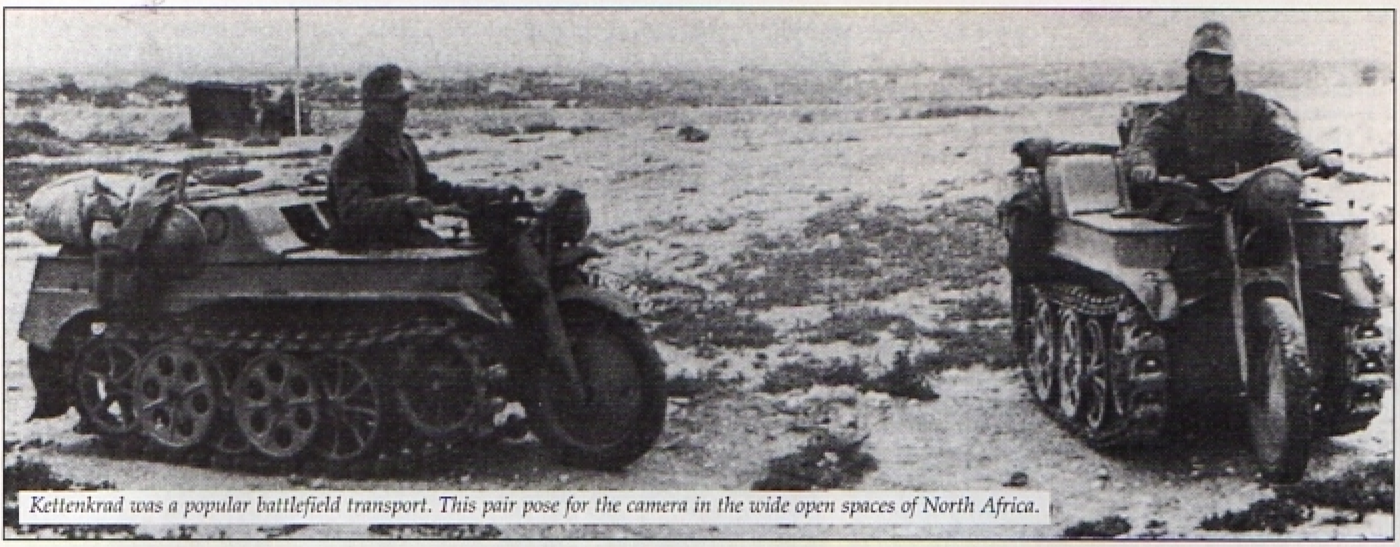
'KETTENKRAD!'

John Prigent builds Precision Models' 1:15 scale kit of the Wehrmacht's ubiquitous 'half-tracked motorbike'

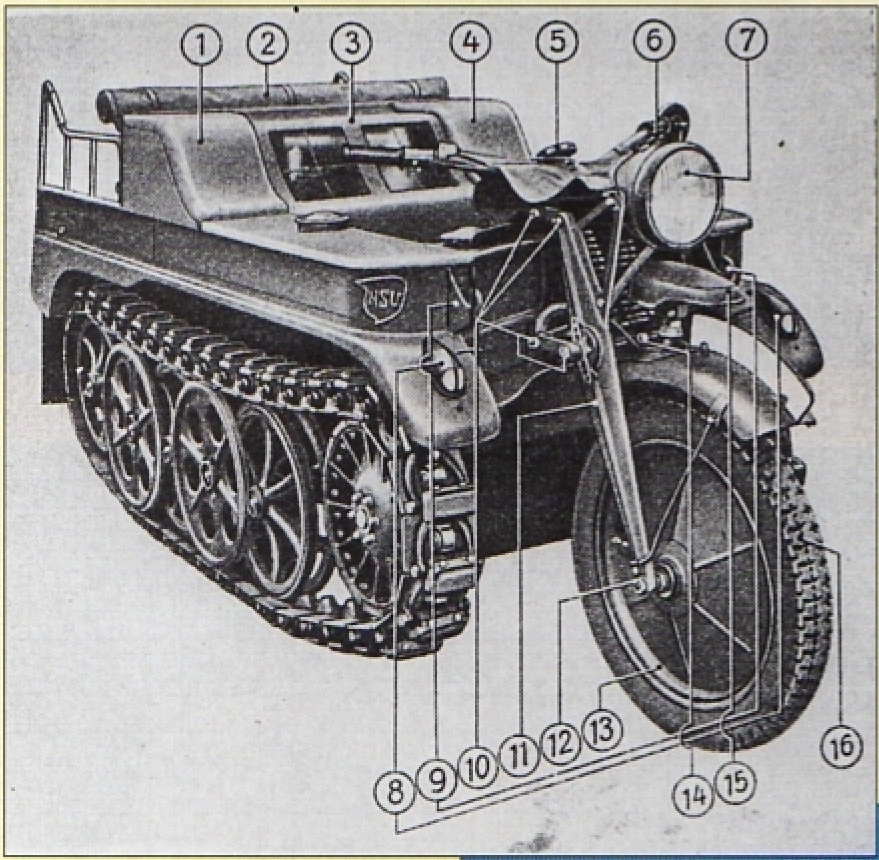
My subject this time is a kit from Precision Models, and a complete departure from their usual German artillery in the form of a big, 1:15 scale *SdKfz 2 Kleines Kettenkraftrad*. This small German vehicle can best be described as a cross between a motorcycle and a half-track, and was actually a nippy little light tractor capable of 70 kph on roads.

The *kettenkrad** could carry, in addition to its driver, two fully equipped men or a 200 kilo payload as well as towing a trailer with a further 450 kilo load, and had a very good cross-country performance. Such a useful vehicle was widely used throughout WWII by *Wehrmacht, Waffen SS* and *Luftwaffe* units in several capacities - personnel carrier, telephone cable layer and aircraft tug to name just three.

Several versions are found in photographs, and Precision's kit depicts the final type with front tow hooks below the level of the track-guards, webs between the rear handrails, and a rounded rear light housing.



Kettenkrad was a popular battlefield transport. This pair pose for the camera in the wide open spaces of North Africa.

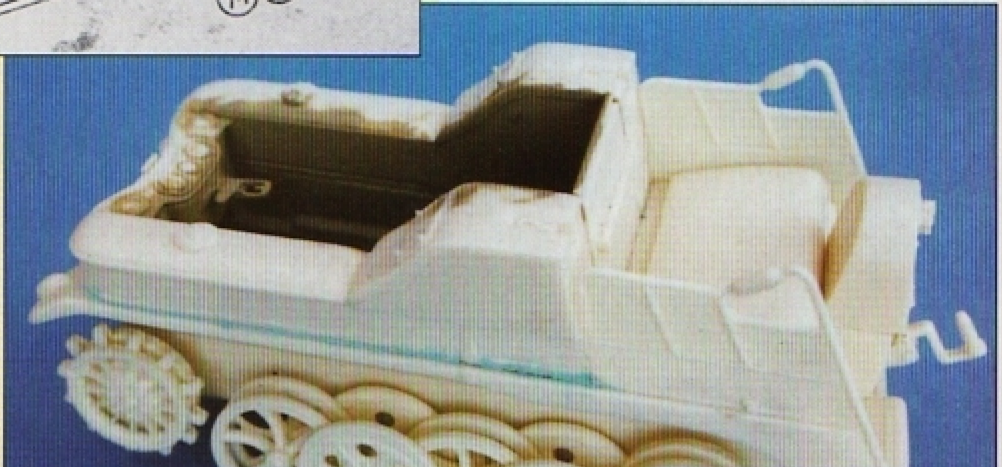


Front view
1. Battery compartment.
2. Tarpaulin cover.
3. Engine cover.
4. Spare track and equipment compartment.
5. Steering damper.
6. Headlight/sidelight/ignition switch.
7. Headlight.
8. Sidelights.
9. Front towing hooks.
10. Pivoting and elevation adjustment points.
11. Front forks.
12. Wheel nut.
13. Front wheel.
14. Fork-pivot grease nipple.
15. Shrouded headlight for night driving.

Precision's kit is almost all resin and very well cast, with 149 parts, not counting the 90, two-part track links, and a section of brass mesh to add to the engine air vents. Strangely, although the smaller parts can safely be snapped from their casting blocks after scribing with a sharp blade along their joins, the larger parts have big blocks which take a good deal of effort to remove! The block under the main hull is best tackled by sawing it vertically into sections and then sawing these off horizontally, leaving as little as possible to remove with wet and dry paper. The resin used is quite hard, so coarse wet and dry paper is needed with the finer grades used only for final polishing.
Editor's note: kettenkrad *is the shortened official form of* kettenkraftrad *seen in German documents.*

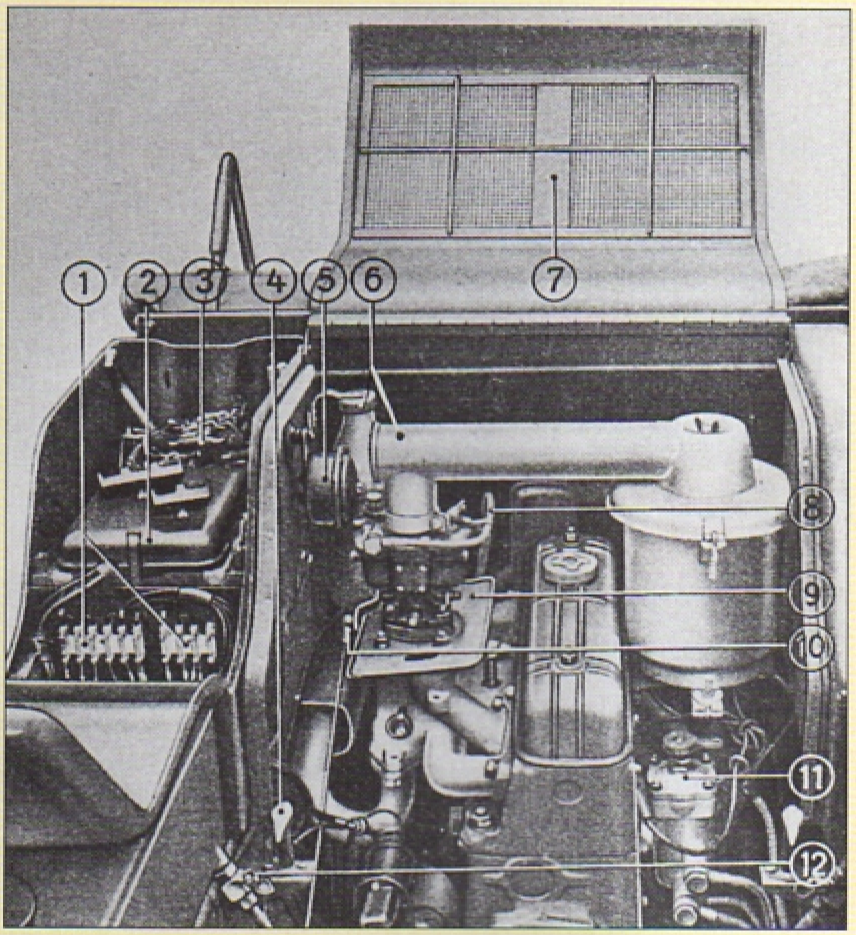
Building begins

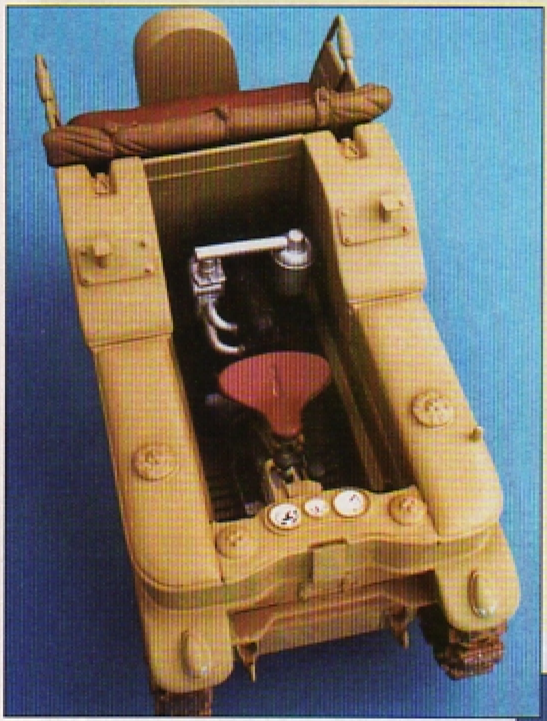
First things first, I laid out the parts and identified them against the illustrated parts list. With this done I turned to stage one of the instructions, construction of the front handlebar/fork/wheel assembly. This turned out to be a mistake, as I was unable to get the correct angle between the forks and their various brackets, so I recommend that you leave this stage until the main hull is on its tracks. At this point the assembly of these parts will be straightforward, as you'll be able to fix the struts and brackets at the correct angle to the



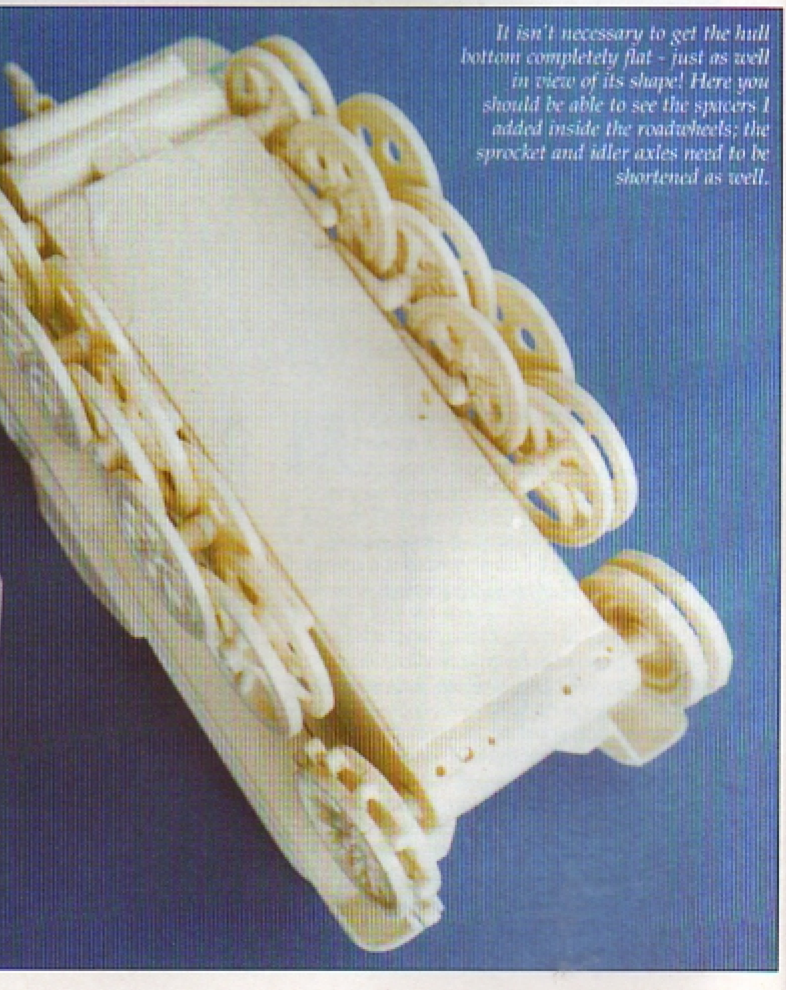
RIGHT: The hull and suspension assembled. Getting flat bottoms on all the parts isn't easy, but a smidgen of filler takes care of gaps as you can see here.

Engine compartment
1. Fuses
2. Battery cover.
3. Snow chains.
4. Engine cover release catch.
5. Horn.
6. Air filter intake.
7. Engine cover.
8. Petrol supply pipe.
9. Carburettor drip-tray.
10. Throttle linkage.
11. Oil filter.
12. Petrol tap (right tank).

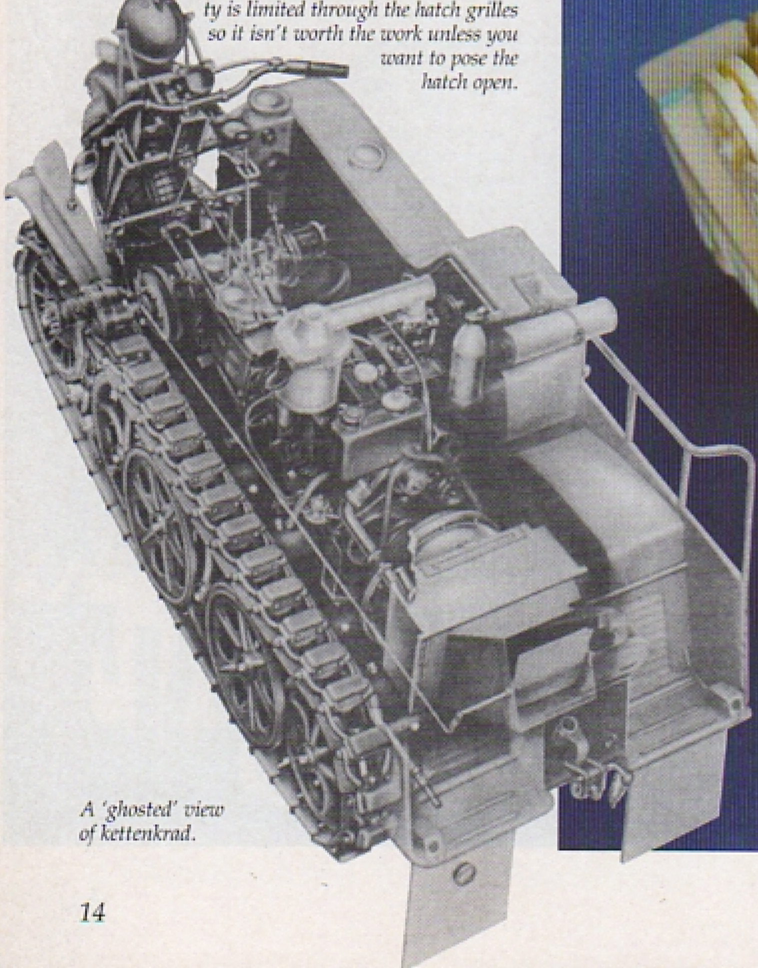




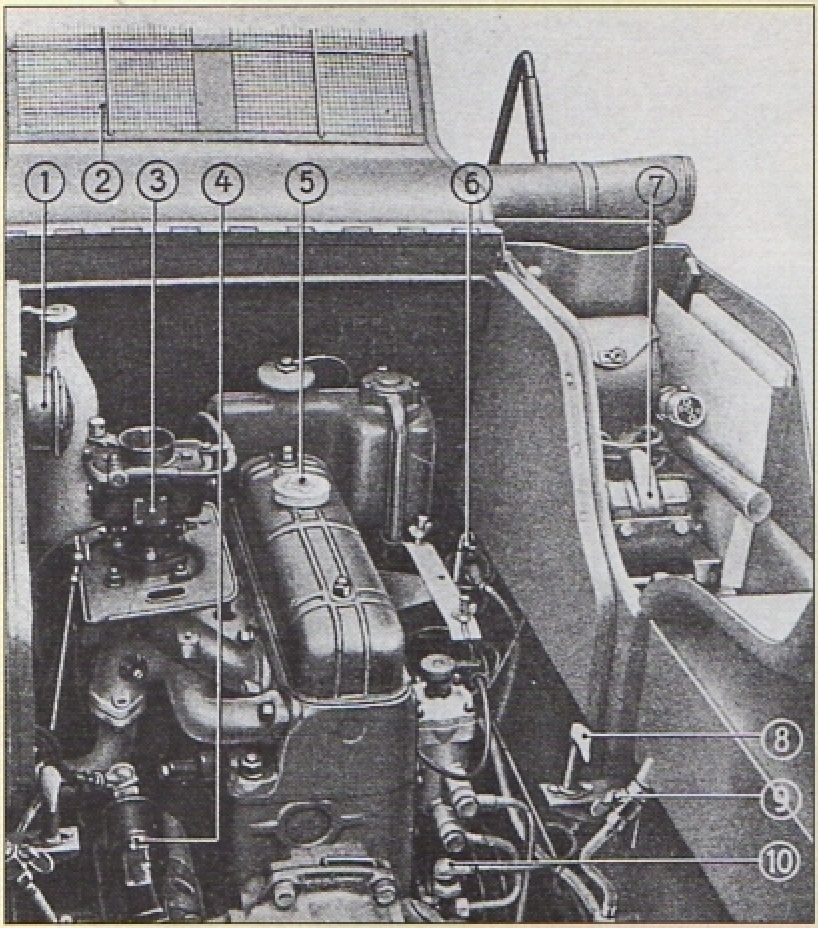
ABOVE: The kettenkrad's engine - more detail could be added in this area, but visibility is limited through the hatch grilles so it isn't worth the work unless you want to pose the hatch open.



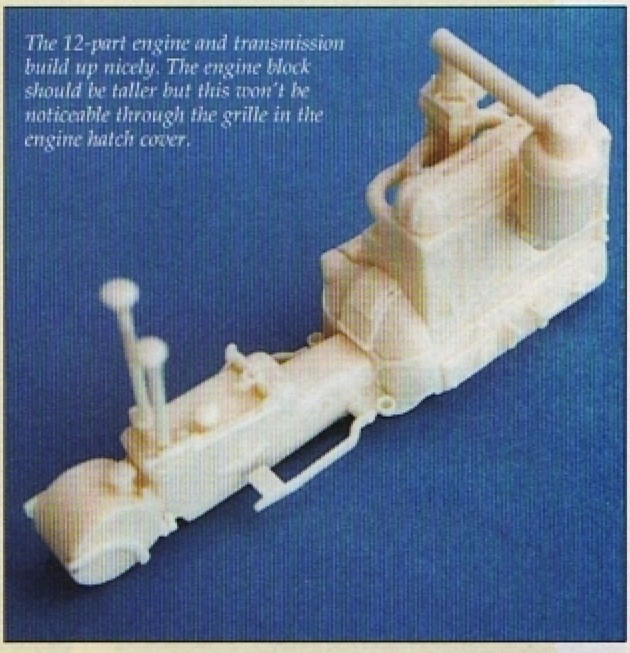
It isn't necessary to get the hull bottom completely flat - just as well in view of its shape! Here you should be able to see the spacers I added inside the roadwheels; the sprocket and idler axles need to be shortened as well.



A 'ghosted' view of kettenkrad.

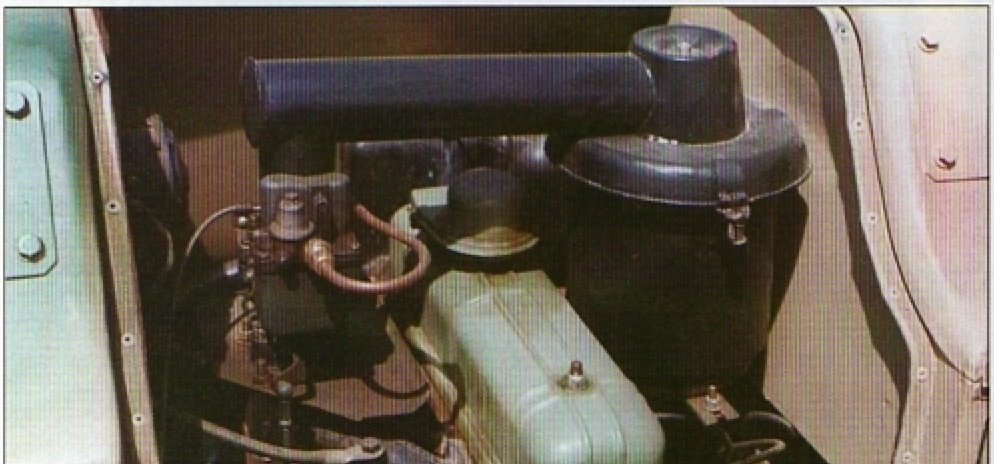


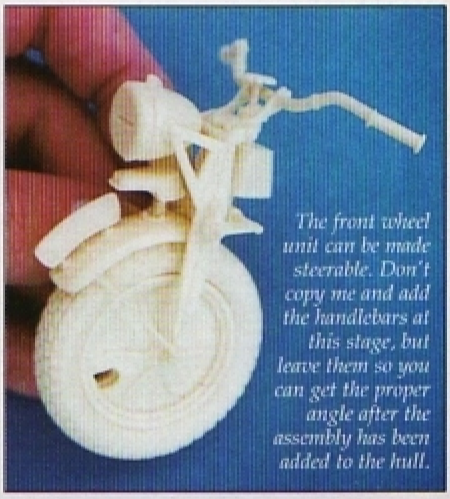
Opel Olympia engine
1. Horn.
2. Engine cover.
3. Solex Sallstrom cross-country carburettor.
4. Starter motor.
5. Oil filler cap.
6. Coil.
7. Spar track/equipment stowage.
8. Engine cover release catch.
9. Petrol tap (left tank).
10. Oil pressure switch.



The 12-part engine and transmission build up nicely. The engine block should be taller but this won't be noticeable through the grille in the engine hatch cover.

BELOW: The engine of a preserved kettenkrad. Photo: John Boyton.



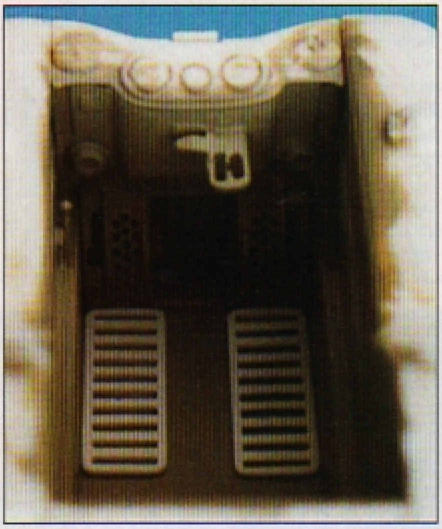


The front wheel unit can be made steerable. Don't copy me and add the handlebars at this stage, but leave them so you can get the proper angle after the assembly has been added to the hull.

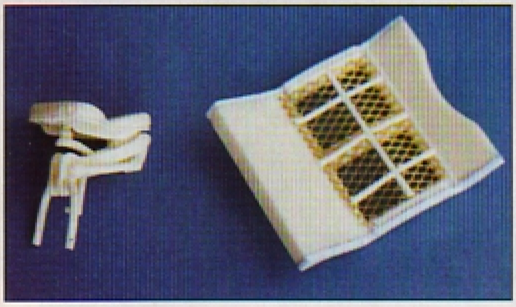
forks to get the front wheel to touch the ground.

You will need repeated dry-fittings and offerings to the hull to gauge this angle, and I suggest that you tack forks 16 and 17 together with part 28 and dry-fit the front wheel between them to give a firm basis to work from. There's enough flexibility in the forks to let you remove the wheel for painting afterwards. My pre-assembled front fork assembly didn't touch the ground, so I had to 'bodge' it by cutting its front mount to fit at a lesser angle to the hull front than intended.

So, make your first building step stage 2 of the instructions, the assembly of the hull. Once you've removed the casting blocks from the main sections they go together reasonably well, though it is difficult to sand the bases of the sponsons to a true, flat surface,



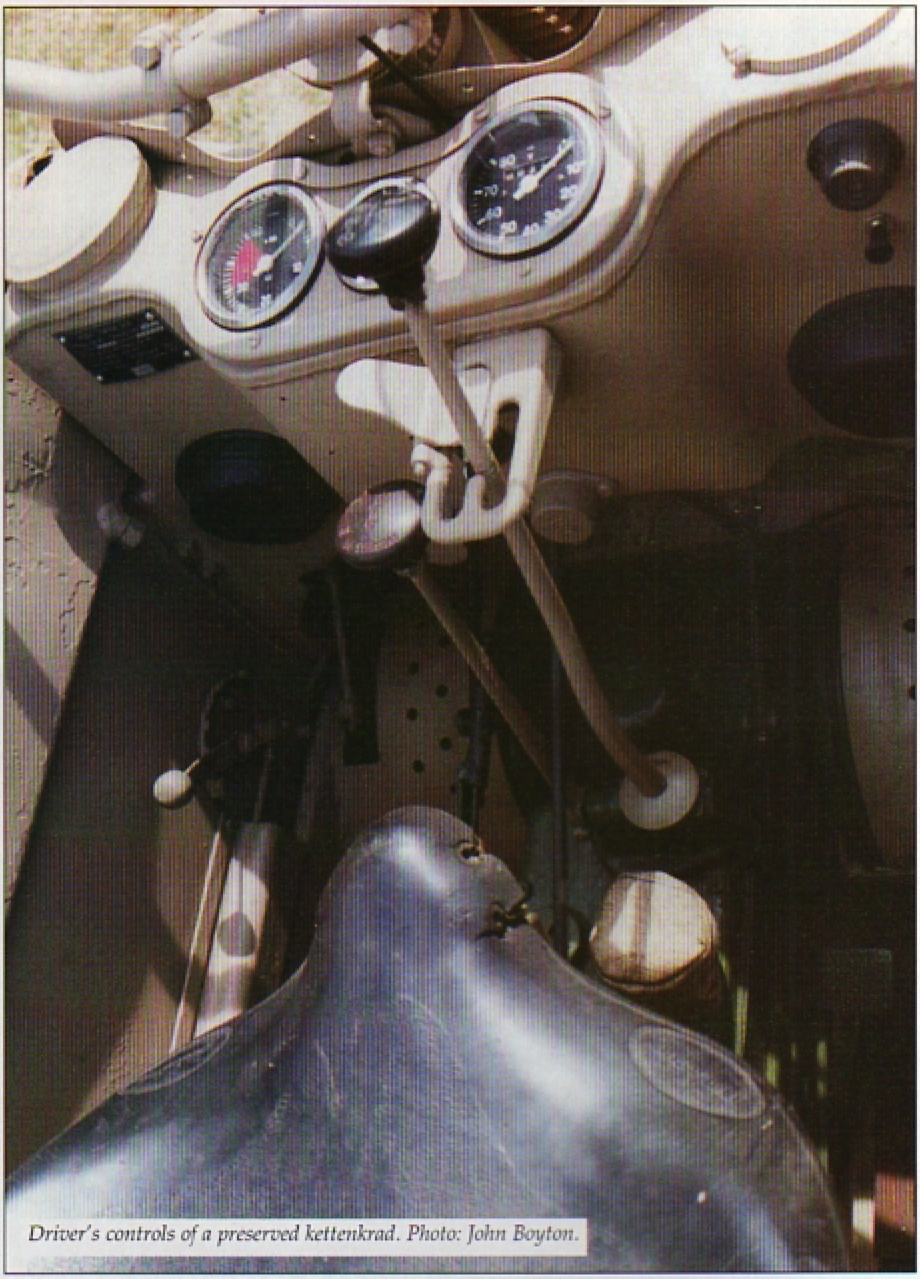
ABOVE: The driving compartment ready for final painting before the engine unit is added.
BELOW: Here's the driver's seat assembly, with the engine hatch showing my 1mm plastic card fillet each side.



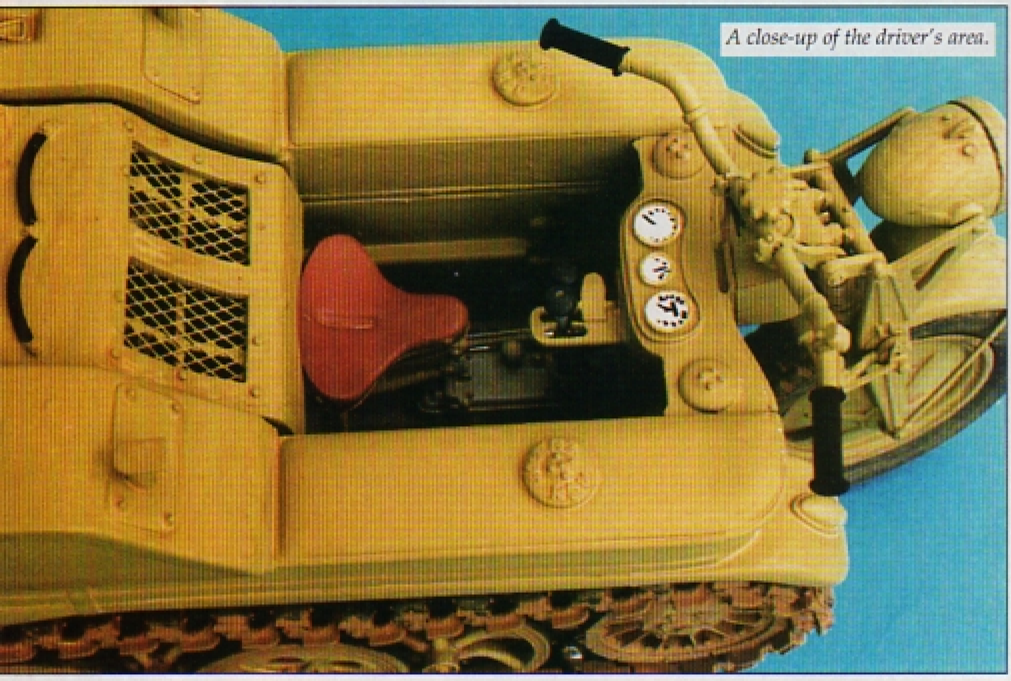
so be prepared to use filler at their joints with the trackguards. Use the rear seat base, part 36, to help keep the trackguards flat while you assemble them, and note that filler may be needed between the footrest, part 39, and the hull rear - mine wasn't a very good fit. The rear side panels, parts 33 and 34, should be part of a continuous plate with the sponson sides; I missed this point, but you should fill the joint between these parts.

The rear light housing, part 73, is the false note of this kit. It's the rounded type, and photographs show that not only is it too deep front to back but the Notek rear night driving convoy light set into it is also too big - there should be room for a rear number plate under the light! I've left mine as supplied, as this is an out-of-the-box report, but it wouldn't be hard to sand down the rear face to eliminate its overhang and add a scratch-built Notek light and trailer cable socket. You could also modify the shape to make the earlier, angular light housing - for either version see the references I quote at the end of this feature. Alternatively, look at the WWII handbook photographs included here.

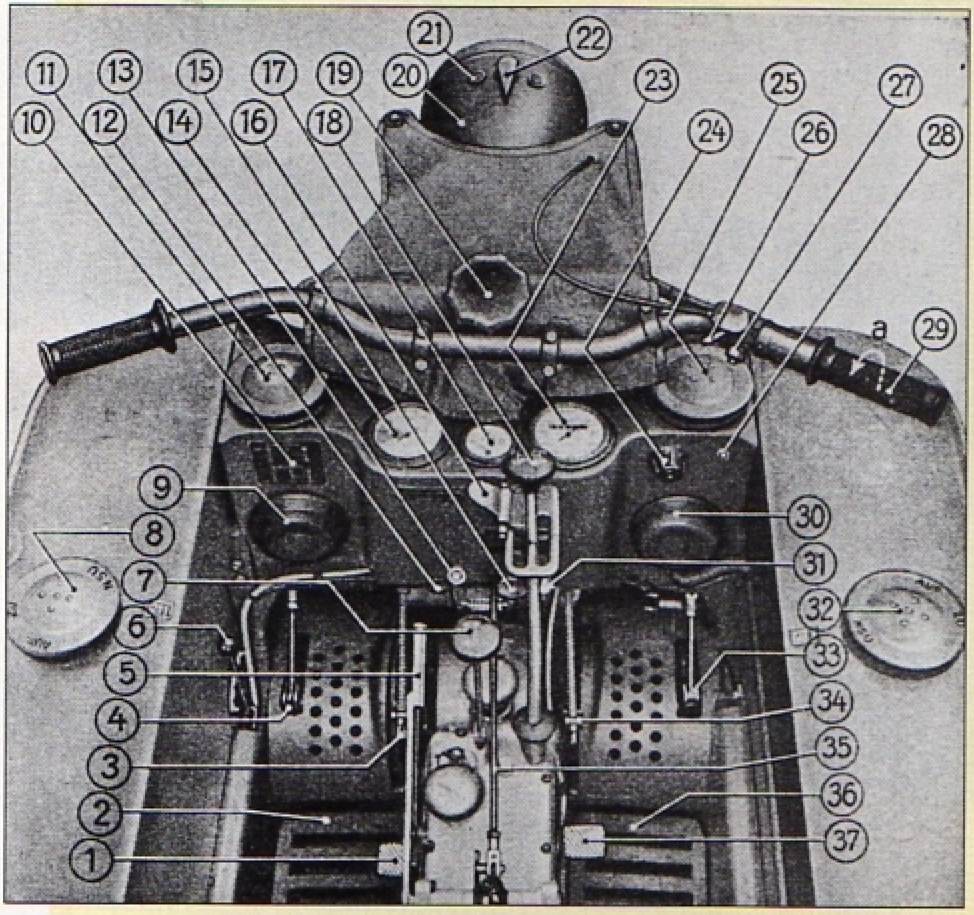
It's not easy to distinguish in photographs the true shape of the inside front mudguards, parts 50 and 51, but these don't meet the ends of the trackguards as they should. Perhaps the trackguard ends should be longer and lower, but an acceptable fix is to cut the bottoms of parts 50 and 51 at an angle to meet them. That's what I did, in default of a real kettenkrad to examine. Finish the hull by adding the axle swing arms, which point forward on both sides. Note that they are not identical - two each side have longer axle parts to fit the first and third wheel stations. Do not add the sprocket and idler axles yet.



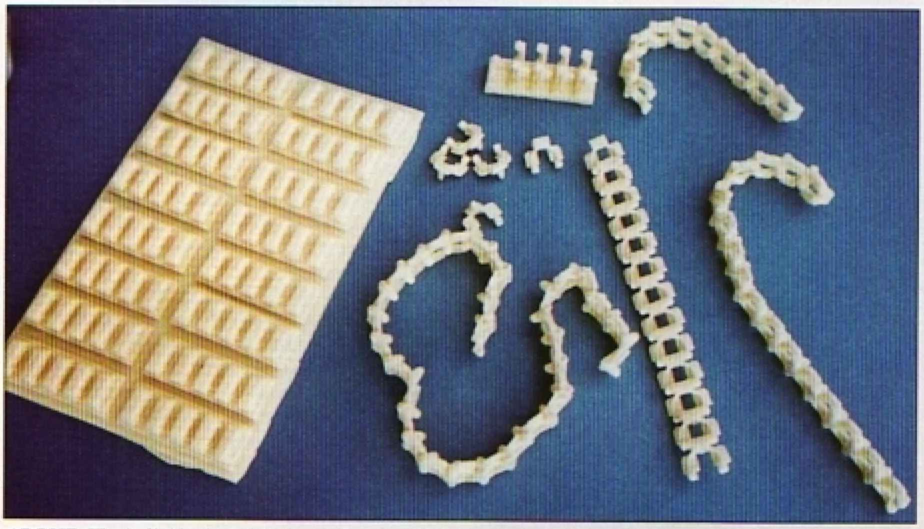
Driver's controls of a preserved kettenkrad. Photo: John Boyton.

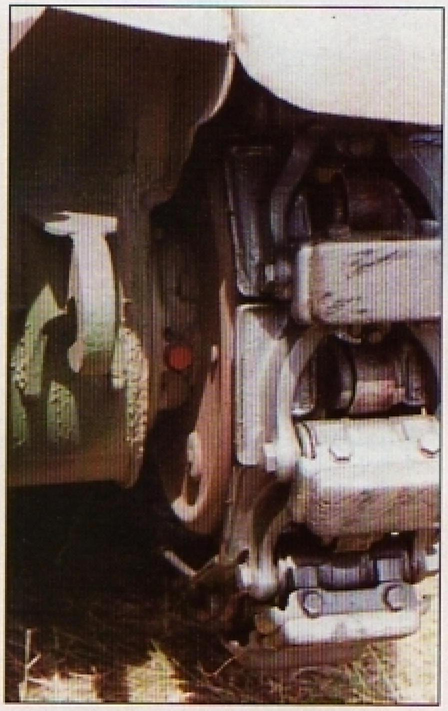


A close-up of the driver's area.



Driver's controls
1. Clutch pedal.
2. Wooden foot board.
3. Left track brake linkage.
4. Brake rod, left track brake.
5. Hand brake, both tracks.
6. Rear cooling flap operating lever.
7. High-low range gear lever.
8. Petrol tank filler cap.
9. Knee pad.
10. Gear ratio information panel.
11 First aid container.
12. Engine cut-out.
13. Starter.
14. Rev counter.
15. Inspection light jack socket.
16. Sprung flap blocking reverse gear gate.
17. Water temperature gauge.
18. Gear shift lever.
19. Steering damper.
20. Headlight.
21. Headlight beam/dip indicator.
22. Ignition/headlight/sidelight switch.
23. Speedometer/odometer.
24. Night driving light system switch. (Notek)
25. Personal effects compartment.
26. Headlight dipswitch.
27. Horn.
28. Oil pressure warning light.
29. Throttle twist grip.
30. Knee pad.
31. Inspection light cover.
32. Petrol tank filler cap.
33. Brake rod, left track brake.
34. Right track brake linkage.
35. Driving brake link rod.
36. Wooden foot board.
37. Foot brake.





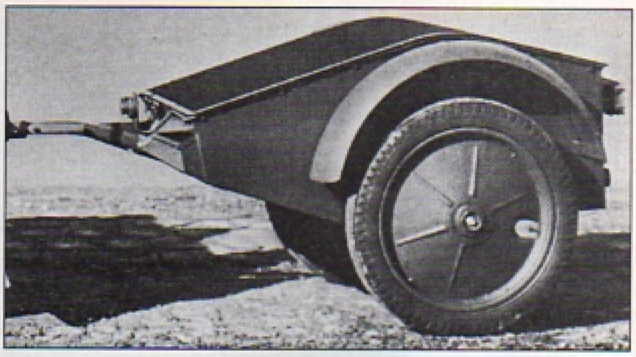
ABOVE: The individual track links can be assembled into runs, but at this scale it's easy to drill and pin them as articulated tracks as I did for one side. Their rubber pads are separate parts. RIGHT: Close up of the left front track, sprocket and tow hook. Note the sprocket teeth have roller bearings. Photo: John Boyton.

Trackwork

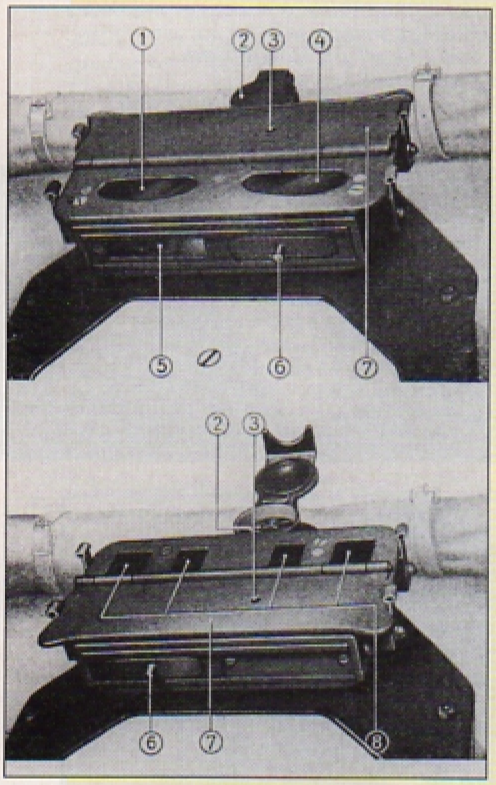
I jumped here to stage 5 and added the wheels and tracks. There's some more very nice casting here, with some wheels cast on backing pieces which cut away very easily to leave unwarped wheels. However, you'll need to cut 2mm sections of plastic tube and fit them between the outer wheel halves 75 and 76 in order to allow the inner wheels to fit between them. After fixing the axle swing arms, which point forward on both sides, attach the outer wheels to them. Slipping the inner wheels into place will reveal that their axles aren't long enough to be used for fixing, but a plastic peg added to each axle will solve this. I cheated and just super-glued the inner wheels to the outer ones. It is undetectable!

Now, dry-fit the idlers, which are smaller that the roadwheels and marked 'K' on their casting blocks, to their axles and offer them to the hull. You will find that they don't line up with the roadwheels, and need cutting down to length. before these parts can be fixed. The sprockets come next, and similarly need the lengths of their axles adjusted before fixing. Note that their inner halves, parts 78, are shown the wrong way round on the instruction drawing - the dished surface fits against the inside of the outer half, with the axle hole on the inside of the finished wheel. Precision give you very nice separately cast 'teeth' for these sprockets, just like the originals which had roller bearings instead of solid teeth. Fix these when you're happy with the sprockets' distance from the hull, but don't fix the sprockets in place yet.

The tracks are also very neat castings, coming vertically from their casting blocks. All

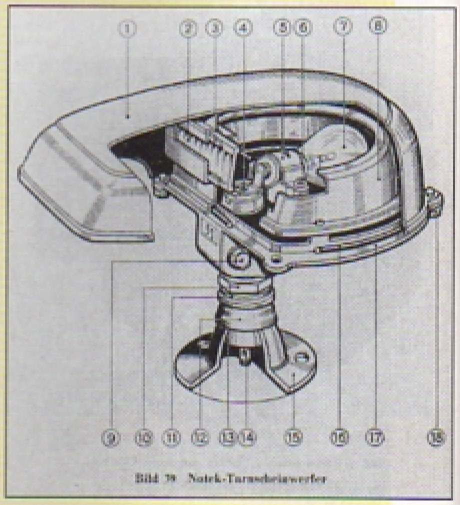


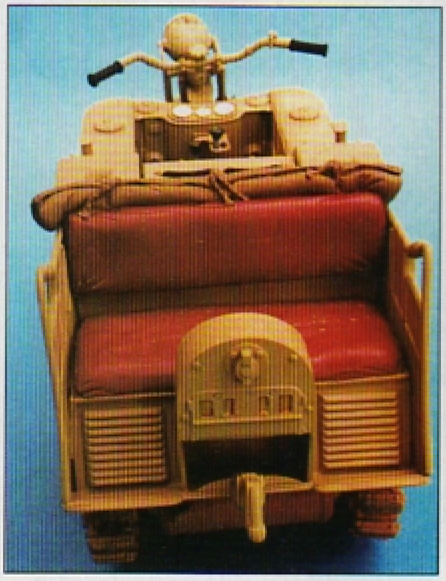
ABOVE: The small trailer for kettenkrad was equipped with electrics for the Notek night driving system and vehicle lights. LEFT: Posed early war shot of a fully manned kettenkrad and trailer negotiating a roadside ditch.



Notek Rear light unit for convoy station keeping at night. (Abstandrücklicht)
1. Red rear light.
2. Electrical socket for trailer lights.
3. Hinged shutter in upper position covers four station keeping lights.
4. Red Brake light.
5. White licence plate light.
6. Sliding shutter over licence plate light.
7. Hinged shutter in lower position exposes four station keeping lights.
8. Four station keeping lights (yellowish-white colour).

Notek Shrouded headlight for night driving. (Tarnscheinwerfer)
1. Headlight upper casing.
2. Projector glass produces a broad light beam downwards onto the road ahead.
3. Rubber seal around glass.
4. Bulb positive contact.
5. Bulb holder.
6. Bulb holder securing screw.
7. Bulb.
8. Mirror reflector around upper casing.
9. Bolt fixing the light unit to its ball mounting unit.
10. Hexagonal locking nut for adjustable ball mounting.
11. Spring washer.
12. Electric supply connection from vehicle.
13. Outer attachment on adjustable ball mounting.
14. Inner attachment of ball mounting.
15. Base plate with ball mount.
16. Rubber seal.
17. Floor plate.
18. Casing securing nut.





LEFT: The only real problem with the finished kit is the oversized rear Notek convoy light - there should be a number plate below it, but there isn't room!

that's needed is scribing at the joint and they'll snap cleanly away - I wish all resin track links were this simple to separate!

You can either super-glue the tracks together in lengths to fit round the wheels, or drill and pin them to articulate like the real thing; at this scale the latter is simple, and I built one side each way to prove it. They fit with the open ends of their 'U' shapes pointing up at the front of the hull. The track pads need to be sawn from their casting blocks and can then be fixed to the links. Note that they fit horizontally to the closed ends of the 'U's - if you articulate your track, you may need a thin spacer between pad and link castings to get the necessary clearance for the links to move.

Finishing off

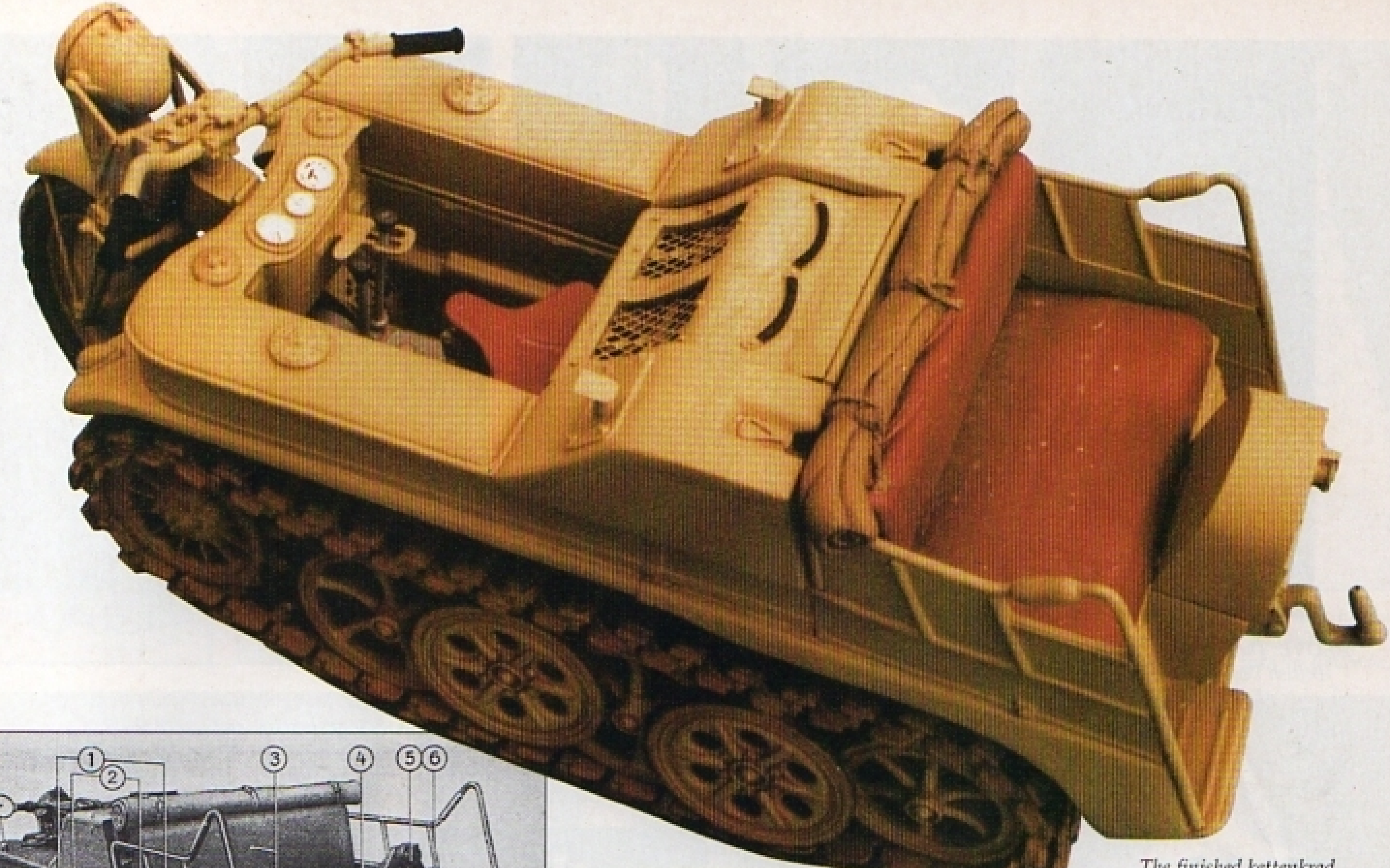
This kit gives not only the exposed gearbox, but also a nice engine to fit under its hatch, which can be posed open if you wish. This is really a bit low - the air cleaner should be just under the hatch - but the completed assembly looks good anyway. It can be built at this point, painted and added to the hull - all that's needed is to leave off the gear lever, part 70, and insert this through its gate on the hull afterwards.

The seat goes on top of the gearbox, and is a nice sub-assembly in its own right. Super detailers can add the hand brake pushrod and brake adjusting arms at this point, but their absence from the kit isn't particularly noticeable - the original vehicle handbook pictures reproduced here and my quoted references show them if you wish to add them.

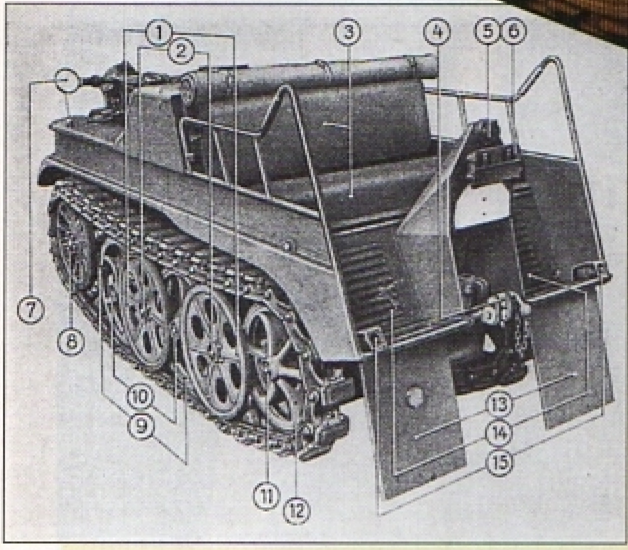
This is the point to build and add the front wheel assembly, and then fit the remaining detail parts. My engine hatch was too narrow, easily fixed with a fillet of 40 thou plastic card added to each side, but it fixed simply to the model thanks to a positioning ledge provided on the front of the passengers' seat back. Many late kettenkrads did not carry the front number plate or the driver's mirror, which I therefore left off although they're provided in the kit. If you do the same you will need to slice the number plate mounts away from the front mudguard.

Colours and markings

I haven't found any photographs showing the late version of the *kettenkrad* in 'Panzer Grey' or 'Afrika Sand', but with such wide usage on all fronts you can take your pick of other schemes. Fortunately, since no suitable



The finished kettenkrad looks good.



Rear view
1. *Outer roadwheels.*
2. *Greasing points.*
3. *Rear seat.*
4. *Towing point.*
5. *Electrical socket for trailer lights*
6. *Rear light unit for convoy station keeping at night.*
7. *Rear view socket.*
8. *Sprocket.*
9. *Inner roadwheels.*
10. *Greasing points.*
11. *Idler greasing point.*
12. *Idler wheel.*
13. *Mudflaps.*
14. *Rear cooling louvres.*
15. *Rear lights.*

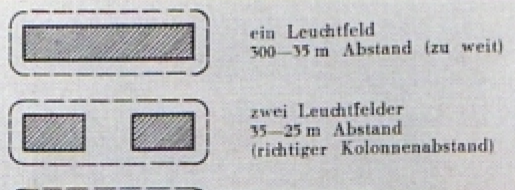


Bild 41 1. Sichtbarkeit der Leuchtfelder des Abstands-Rücklichtes bei verschiedenen Entfernungen

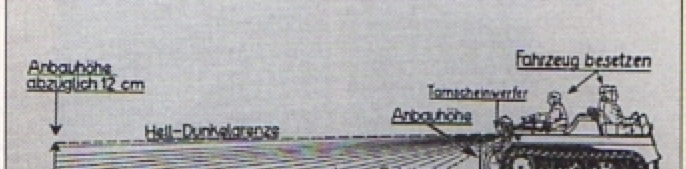


Bild 41 2. Einstellung des Tarnscheinwerfers

The handbook diagram for the Notek night convoy driving system, fitted to German WWII military vehicles, shows the beam shape and dimensions of the kettenkrad's front light unit. The distances are given in metres. The displays from the rear unit are given above and based upon the following driver's eye seeing the four lights merge into two or one. A single bar from the Notek tail light of the vehicle in front meant the distance was too great, being between the maximum distance of 300 metres down to 35 metres where the four lights had visually merged into one. When the four lights merged into two, the correct distance was indicated at 35-25 metres. Four separate lights showing was too close at 25 - 0 metres.

1:15 decals are available, most *kettenkrads* seem to have been unmarked apart from the rear number plate, which should be simple to produce with black rub-down decal numbers on a white background. If you do want to add unit markings they will have to be hand-painted, but again shouldn't be too hard to reproduce at this scale.

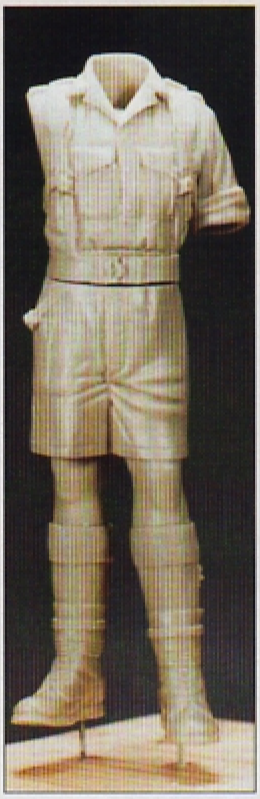
Final verdict

It has to be admitted that this kit is not as accurate as Precision's usual offerings, having been produced from a 'bought-in' master instead of being all their own work. Nevertheless, it is a neat little (big?) model which can be made accurate with some simple scratch building to replace or improve the rear light housing. The complexity of the front fork assembly means that this is not a beginners' model, but more experienced modellers will enjoy its challenge and super detailers can have a wonderful time adding extra detail to the engine and its compartment. The final result really does look like a kettenkrad, so I recommend it despite the problems mentioned above.

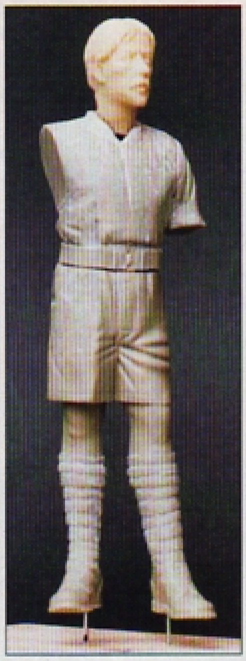
References

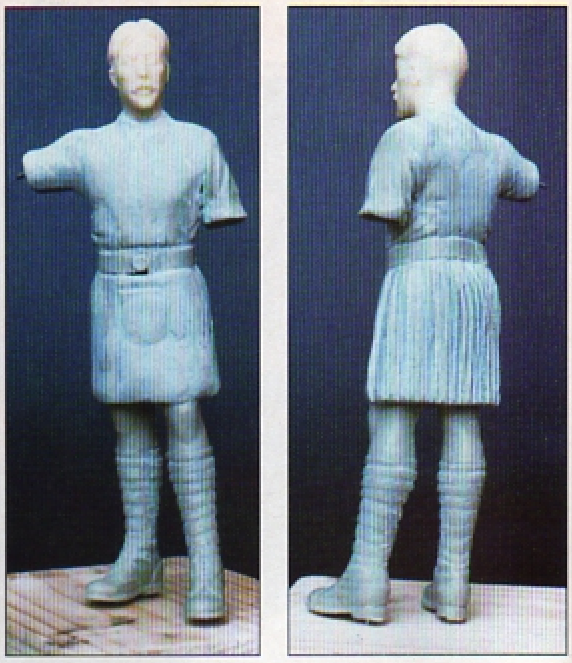
The best reference is the out-of-print *German Military Motorcycles*, by Tony Oliver and Ken Jones (yes, the editor of ***Military Modelling***) and published by Almark in the 1970s. This contains internal photographs as well as in-service shots and colour plates. If you can't get access to this, a currently available book is *The Kettenkraftrad* by Friedhelm Abel, ISBN 0-88740-315-8, number 38 in the Schiffer Military History series and quite cheap to buy. ■

SuperScale 120mm
534
BRITISH DESERT RAT WWII
VERLINDEN PRODUCTIONS
Made in Belgium



ABOVE: The Verlinden Productions British Desert Rat WWII used for the basis of this conversion. RIGHT: Both main body halves are required from the kit, glued together, and mounted to a wood block via pins drilled and glued into the figure's feet.

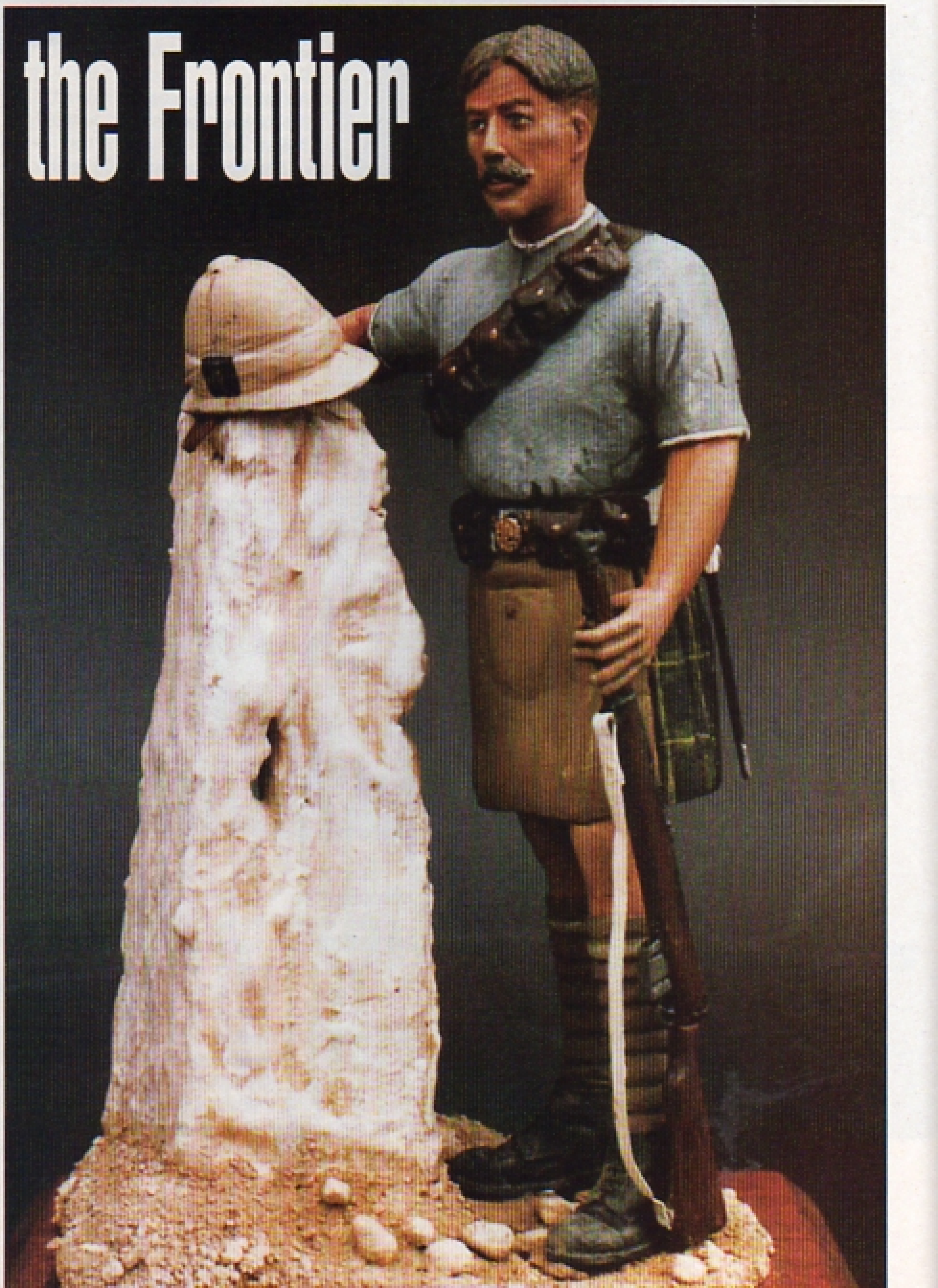




ABOVE: All unwanted moulded detail has been removed from the figure and a replacement head has been added. The socks and short puttees are in the process of being remodelled into longer puttees. ABOVE RIGHT: The shirt, kilt and kilt apron have been modelled in Milliput. Note the removal of hair to produce an Army 'short back and sides' of the period. The right arm and shoulder have been built up to enable it to rest on the wall.

Highlander on the Frontier

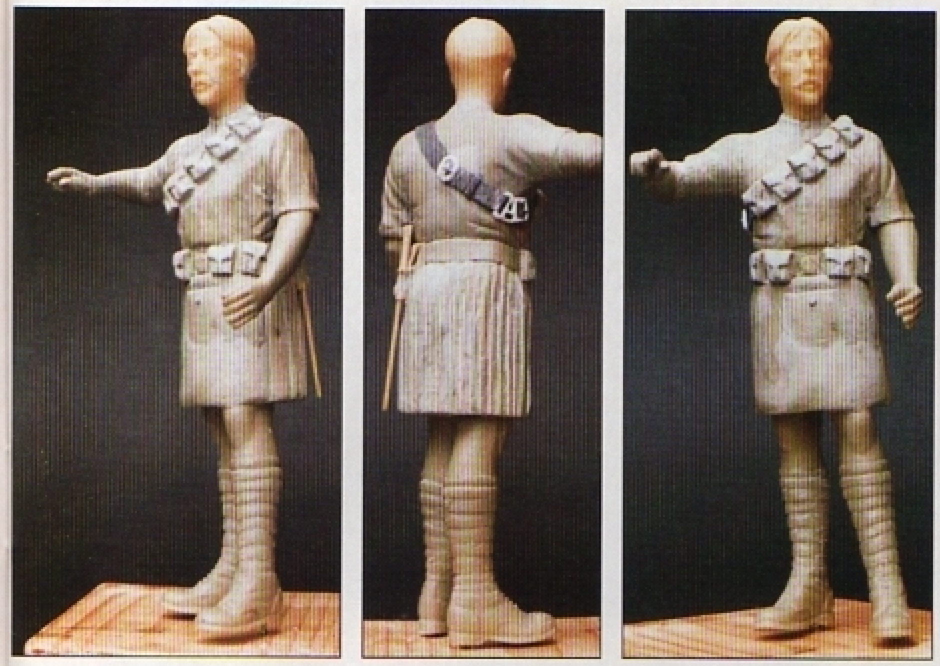
Rod Smith converts a WWII British Desert Rat to a Gordon Highlander of 1908

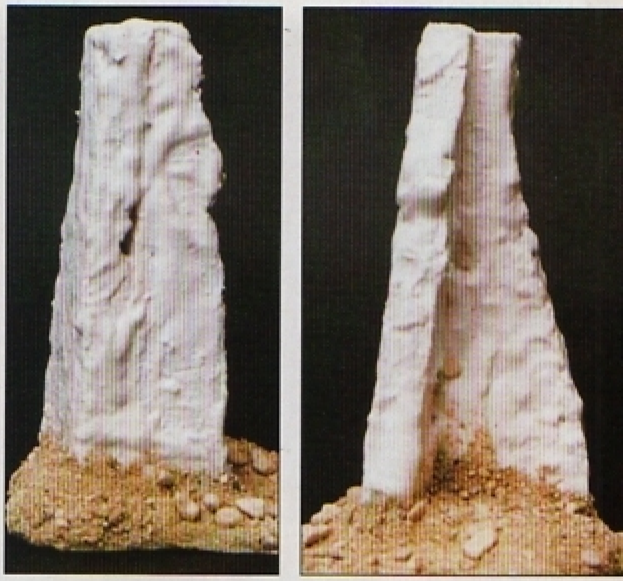


Whilst looking for a new subject to model, I was aware that the Victorian Military Society were holding their annual fair and the theme for their event was the North West Frontier of India, a 'theme' that lasted over 100 years. This proved to be the inspiration for a miniature figure conversion.

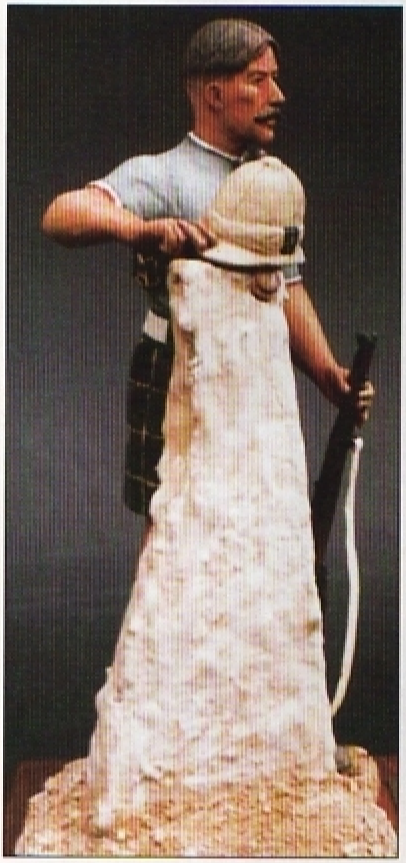
For reference, I used the Osprey Men -at - Arms, *North West Frontier 1837-1947*, which has a colour plate depicting a private of the Gordon Highlanders 1908. This is the figure I decided to model and, looking through my well-thumbed Verlinden Productions' catalogue, I found the figure most suitable for converting to a Gordon Highlander was No. 534 British Desert Rat WWII, from the 120mm Super Scale figure range. The figure has the same stance as that in the colour plate and was provided for this article courtesy Historex agents.

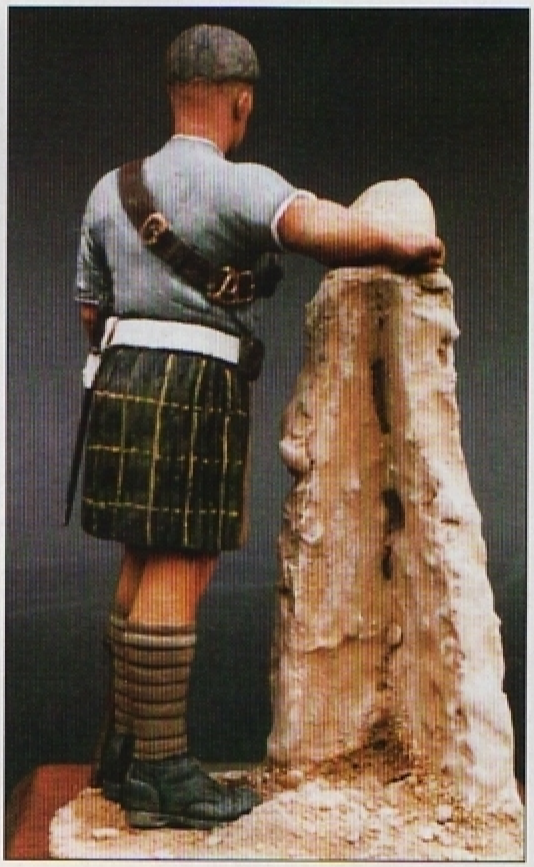
The parts I needed from the kit were selected and the remainder put into the spares box. I selected a replacement head from a spares set by Roll Call miniatures and set about removing the resin blocks and cleaning the parts up. I glued the torso, legs and left shoulder together and once set, I carved away detail from the shirt and reduced the size of the short putties and thick socks into longer puttees that wound around the legs between the top of each boot to just under the knee. At this stage I fitted pins into the base of the feet to give extra strength to the figure when fixed to the base.

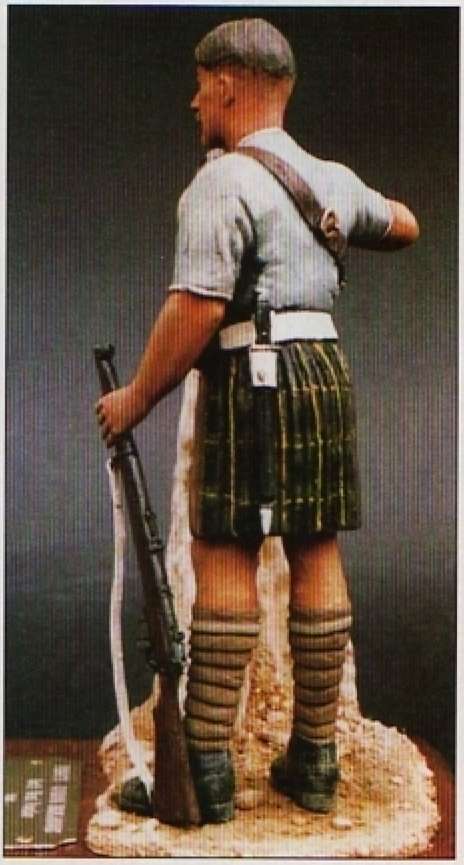




LEFT: The ammunition pouches on the belt and the bandoleer were made up from Milliput. The bayonet is a kit item. ABOVE: The wall and groundwork make up the scenic base to pose the figure on.







I glued the head in place and once it had set I carved some of the moulded hair away from the resin head to give the typical 'short back and sides' haircut of the period.

The position of the right arm is different to that supplied in the kit, so it was necessary to build up the right shoulder. I did this by fixing a wire pin into the torso then building up the shirt sleeve using Milliput epoxy putty. With enough putty mixed I built up the shirt, kilt and kilt apron.

I used epoxy putty to make the ammunition pouches on the waist belt and the bandoleer pouches, the buckles I made from plastic card. once the putty was set hard I finished it off with a sharp craft knife and file. The arms were now glued in place as was the bayonet/scabbard supplied with the kit.

The helmet held in the right hand came from a set of heads wearing overseas pattern helmets in the Roll Call range. I removed the helmet from the head by drilling small holes underneath the helmet brim, I was then able to prise the helmet from the head thus saving what was left of the head to be used at a later date. A chin strap was added from lead foil; the helmet was then fixed in place to the right hand.

The scenic base was made from epoxy putty pressed into shape on a piece of grease-proof paper which stops the putty from sticking to the working surface; once the putty sets the grease-proof paper is easily removed from the part. The walling was made from pieces of polystyrene roughly cut to shape and size then glued together and fixed into place using PVA wood glue. I then coated the part in a thick mixture of Polyfilla, to give a rough stone effect.

The base area was covered in stone grit and the terrain and wall were painted in Humbrol enamels once dry and fixed onto a wooden base. Two holes were then drilled into the scenic base, through to the wood base to accept the pins in the figure's feet.

I painted the flesh tones on the figure in artists' oil colours and the rest of it in Humbrol enamels. The rifle was now attached and the figure fixed in place on the base. I added an engraved brass name plate to finish off the model.

Sources

North West Frontier 1837-1947, Osprey.
British Infantry Equipment 1808-1908, Osprey.
The Scottish Regiments by Diana M. Henderson. ■

Two from the Third Crusade

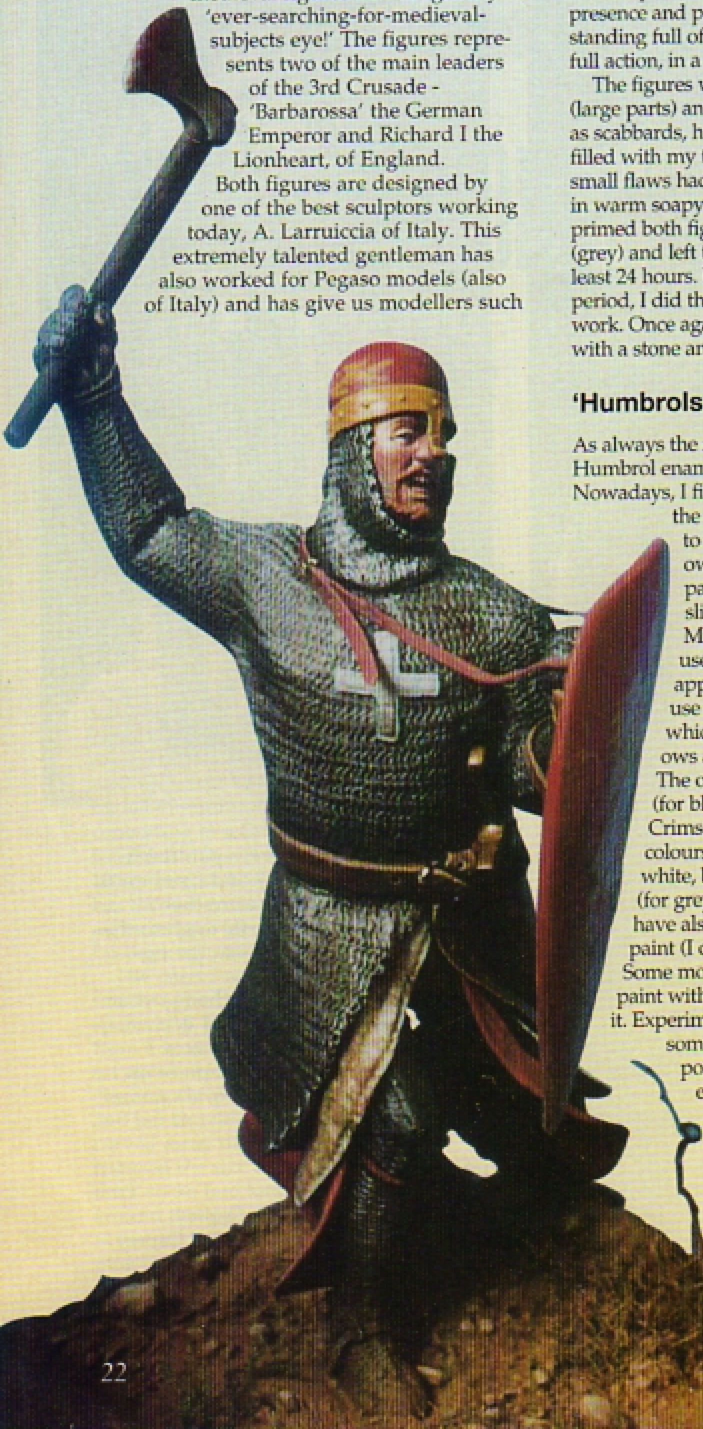
Mike Blank assembles and paints two 54mm from the Italian company Soldiers de Lucchetti

At last year's Euro Militaire Show, the Italian company Soldiers de Lucchetti released two (amongst several) 54mm medieval figures that caught my 'ever-searching-for-medieval-subjects eye!' The figures represents two of the main leaders of the 3rd Crusade - 'Barbarossa' the German Emperor and Richard I the Lionheart, of England.

Both figures are designed by one of the best sculptors working today, A. Larruiccia of Italy. This extremely talented gentleman has also worked for Pegaso models (also of Italy) and has give us modellers such classic figures as 'Frederick II of Swabia' (90mm) and 'Louis XV' (90mm). Both are outstanding and shows the ultimate in design, sculpting, pose, etc. It's always a pleasure to work on figures designed by this sculptor, and 'Barbarossa' and 'Dickie' (Richard I) are no exception.

Both figures are cast in high quality white metal and are designed in several parts which go together without almost any filling. I really like the poses of these figures, which show a presence and personal character; 'Barbarossa' standing full of royal dignity and Richard I in full action, in a midst of a battle.

The figures were assembled with epoxy glue (large parts) and super glue (smaller parts such as scabbards, helmet, etc.) Any minor gap was filled with my trusty A&B putty, when any small flaws had been checked. I washed the kits in warm soapy water, and once fully dry, I primed both figures with Floquil* spray primer (grey) and left them to completely dry for at least 24 hours. During this impatient waiting period, I did the bases, or should I say, ground work. Once again I used A&B putty, shaped with a stone and covered with crushed cat litter.



'Humbrols and oils'

As always the figures were painted with Humbrol enamels plus artists' oil paints. Nowadays, I find it as a must to deepen some of the Humbrol enamels with oil paint to obtain a richer and stronger shadow tone. I add about 20-30% oil paint to the Humbrol mix, thin it slightly with white spirit (or Miljònafta, the Swedish version I use - try to pronounce that!) and apply it in thin, controlled washes. I use this on all colours except white, which doesn't need such strong shadows as the rest.

The oil paints I use are: Prussian Blue (for blue/dark blue colours); Alizarin Crimson (for pink/red/crimson colours); Burnt Umber (for khaki, off white, brown, etc., colours); Lamp Black (for greys/dark grey and black colours). I have also Zinc White and a 'Green' oil paint (I can't remember which one!). Some modellers still think you can't mix oil paint with Humbrol enamels. Not true! Try it. Experiment and you may come up with some lovely tones and colours not possible by using any of these enamels and oil colours by themselves.

For the white clothes of 'Barbarossa', I used Humbrol White 34 plus a touch of Black 33 and Natural Wood 110. This will give you a warm, greyish off-white shade. For shading, add more and more Natural Wood and black.

For shading white, I use 4-5 steps of shading. For highlights I add more white. The final 'high highlight' is a mix of Humbrol White plus Zinc white oil paint (to obtain a stronger and more vibrant colour than Humbrol white alone can produce). I truly enjoy painting white and black colours in figures., both are very challenging, but also very rewarding and, if properly done, very dramatic.

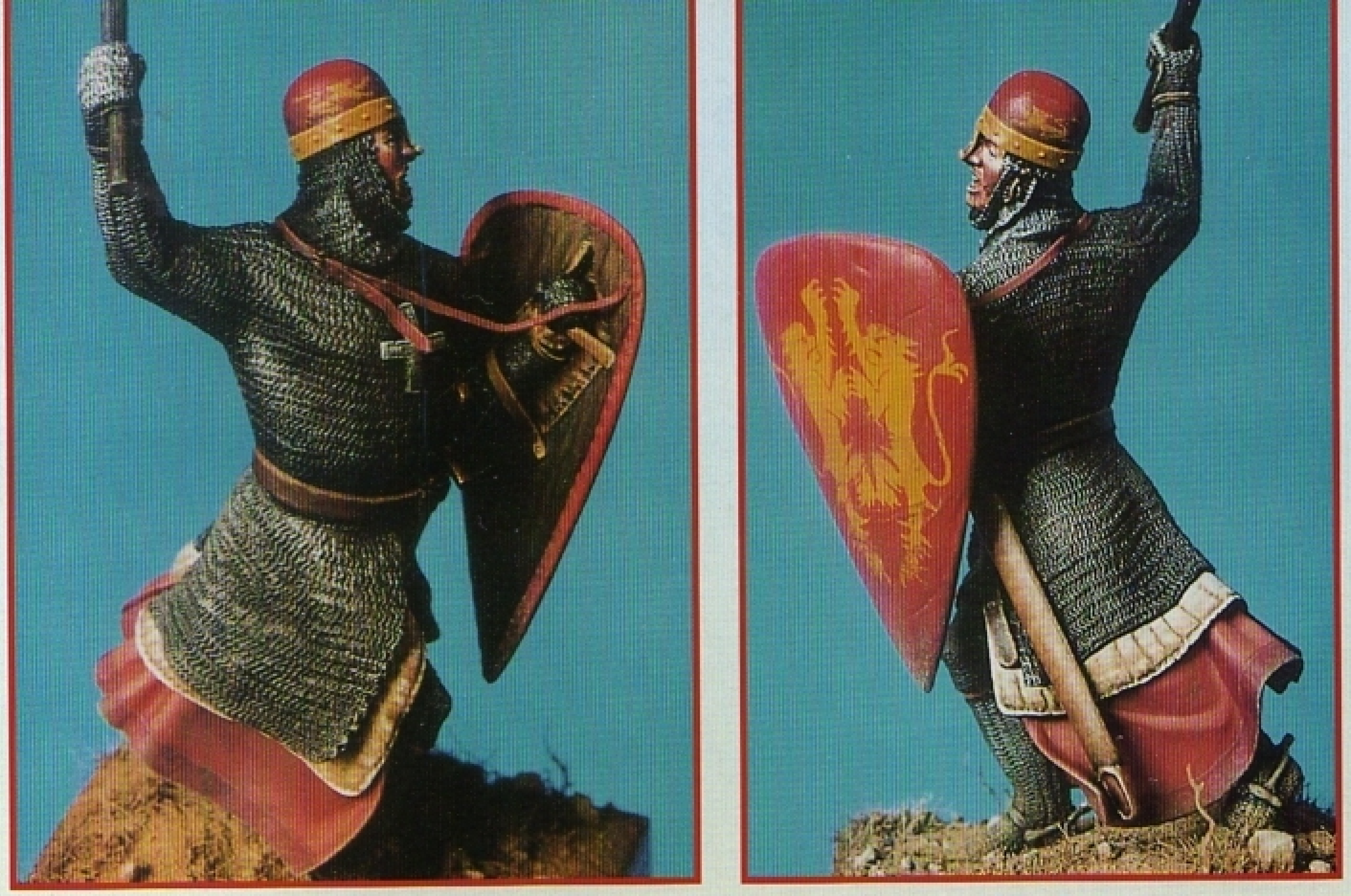
The imperial eagle on Barbarossa's surcoat was painted with black plus Flesh 61. Shading was done with black and highlighted by adding more flesh plus a touch of white to the base mix. For this detail painting I used a '000' and a '00' sable brush (Winsor & Newton series 7, of course), and my trusty 'helping hands' fitted with a magnifier.

On the Richard figure the chain mail was painted with a mix of Humbrol Silver 11, black oil paint plus Burnt Umber oil paint. Highlights were almost pure silver and shadows from Lamp Black. Rust spots were added from Burnt Umber. For the surcoat hanging down under the mail hauberk, I used Humbrol Red 174 plus Flesh 61 and Natural Wood 110 to obtain a dusty, faded shade of red.

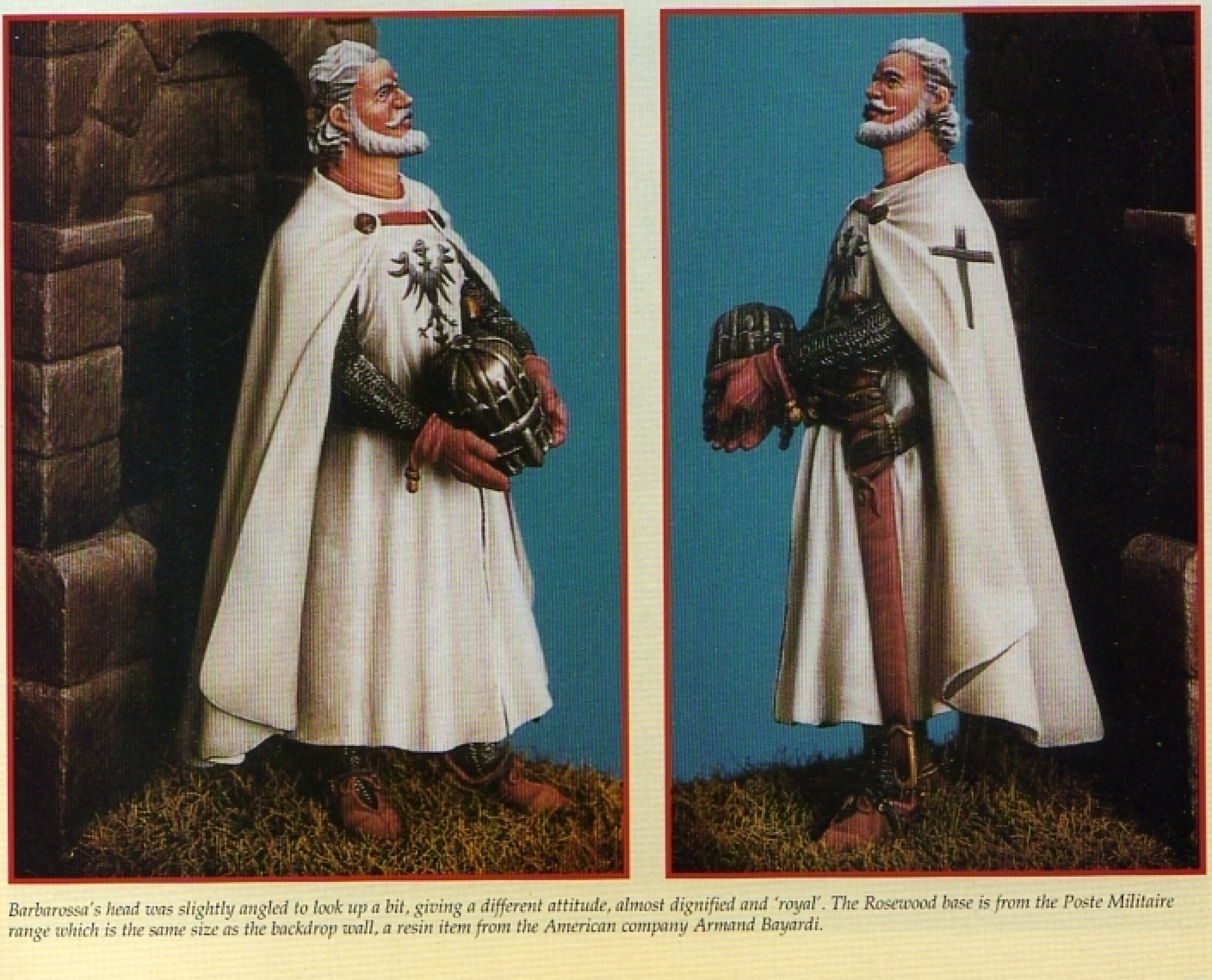
A border with a typical medieval pattern was painted on to add some more detail to an otherwise quite plain figure. The shield was painted red (as was the helmet) with the lions/leopards painted free hand using Humbrol Yellow 154 plus Natural Wood 110.

Weathering was done in my usual way by adding dust, dirt, blood stains, bit by bit, gradually building up the desired effect. So there you have it, yet two other figures from the middle ages painted by yours truly, and what fun they were!

*Floquil Paints. We do not know of an established UK source for the Floquil range. If any reader knows of a stockist would he please let the Editor know for the record. ■



Note the bottom edge of the surcoat has a border with a typical early medieval design. Richard's shield has hand-painted lions. This is an example of what Richard's shield may have looked like. Note the cracks and tears carefully painted using highlights and shadows.



Barbarossa's head was slightly angled to look up a bit, giving a different attitude, almost dignified and 'royal'. The Rosewood base is from the Poste Militaire range which is the same size as the backdrop wall, a resin item from the American company Armand Bayardi.

AS90 on Home Service

In the first of a two-part feature on the Royal Artillery's 155mm AS90 self-propelled gun, Richard Stickland went 'on exercise' on Salisbury Plain with the 3rd Regiment Royal Horse Artillery

The AS90 Self Propelled Howitzer was accepted into British Army service in 1992, to replace the ageing British Abbot and US M109 self-propelled guns. In early 1993 the first AS90 regiment (1st Regiment Royal Horse Artillery) became operational and since then, 179 AS90 have been delivered, equipping five regiments. Each regiment has four batteries of eight guns, although only six are manned in peace-time.

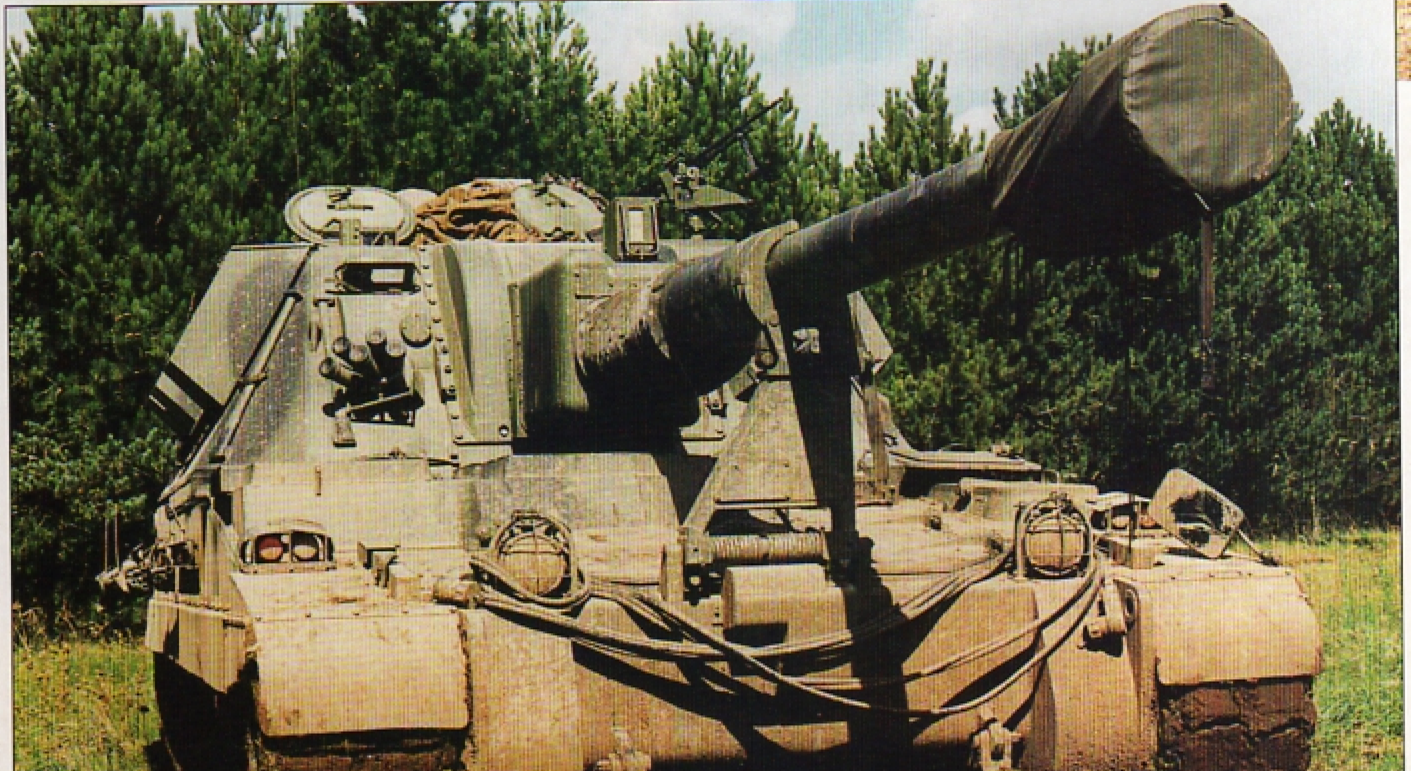
The principle component of the AS90 is the 155mm L131 howitzer which has a 39 calibre barrel and can throw its conventional projectiles nearly 25km; with rocket assisted projectiles it can achieve 30km.

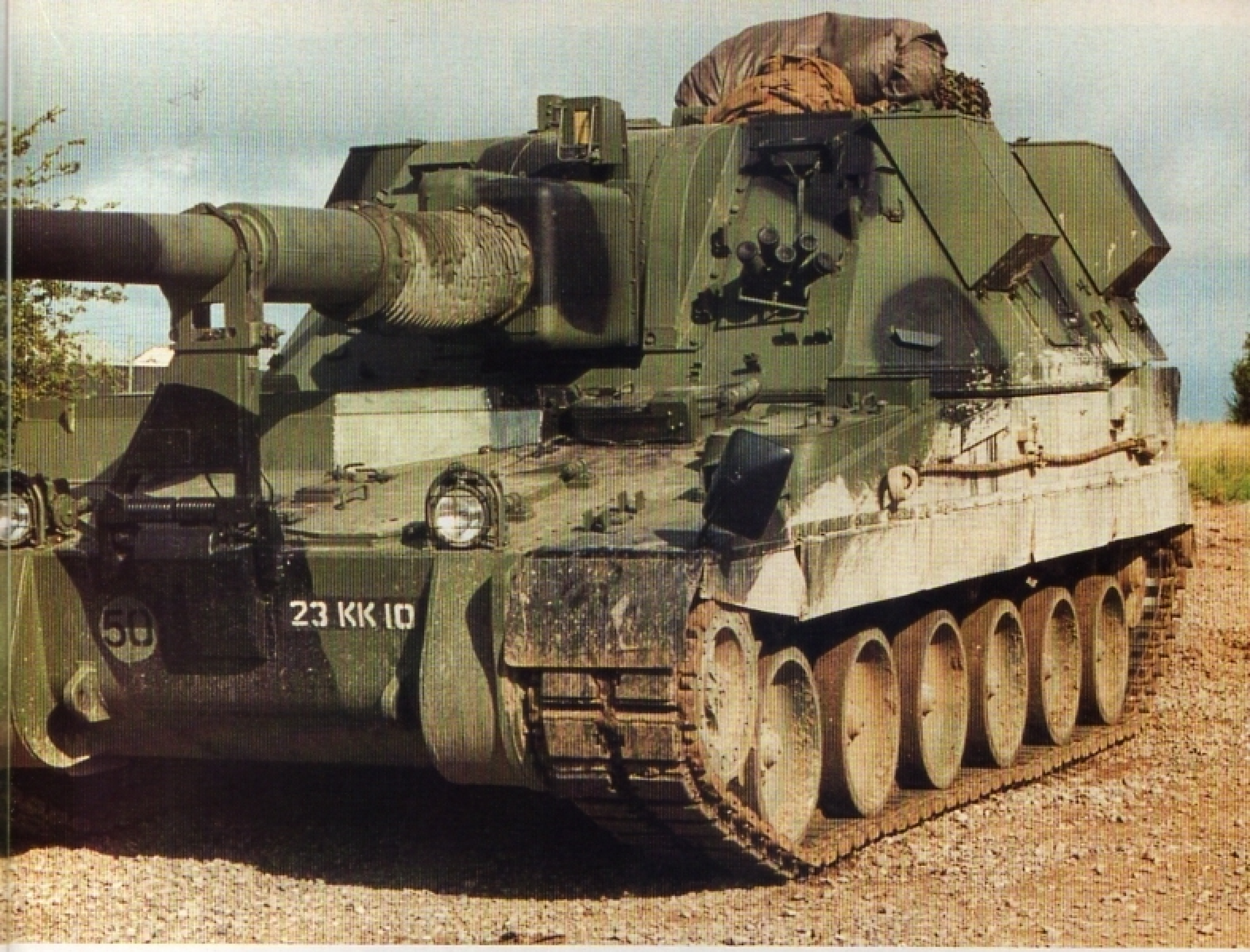
AS90 is equipped with an autonomous navigation and gun-laying system (AGLS), which incorporates an inertial vehicle navigation system and computer controlled gun-laying, magazine control, fuse setting, loading systems, etc.

The armour on the AS90 is only 17mm of steel, but its best protection is its allusiveness. By utilising its 'burst rate' capability the AS90 can fire three rounds in under 10 seconds, therefore, a Regiment can deliver 96 rounds on a single target, in under 10 seconds. Even if the enemy is able to detect the guns, they will be long gone by the time fire is returned.

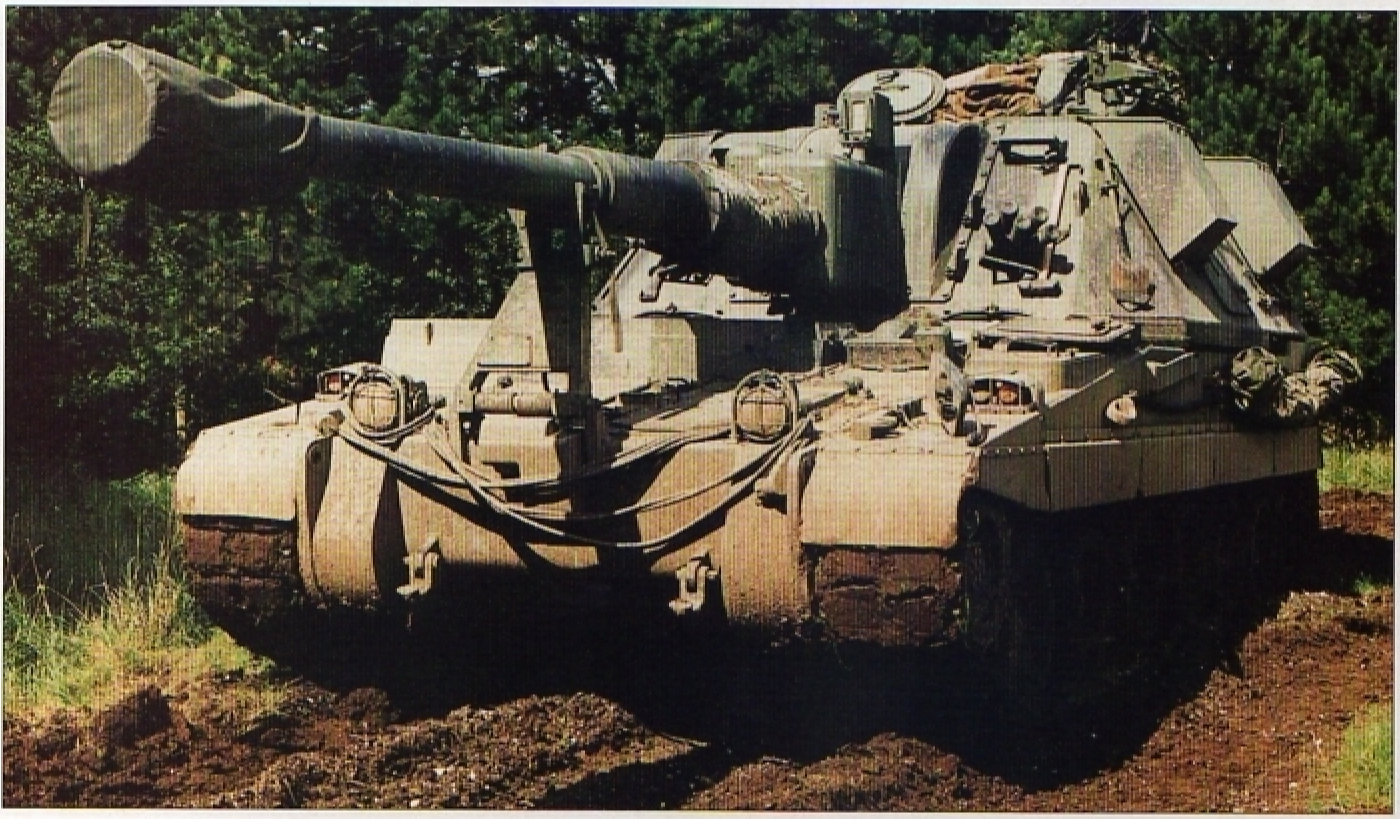
With its ability to fire through a 360° arc without moving the vehicle, the AS90 is an impressive self-propelled platform and has been designed to accommodate numerous future upgrades, such as a longer 52 calibre barrel, fully automated ammunition handling and improved top armour. There are also several other types of AFV that have been designed on the same chassis, so one way or another there are likely to be some interesting additions to the family.

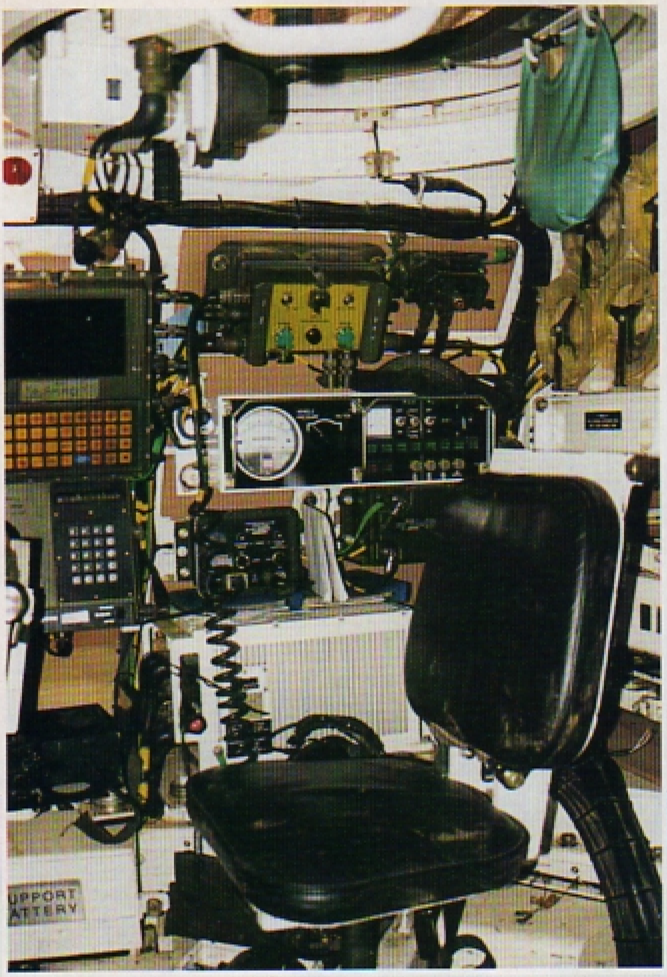
In September 1997, 3rd Regiment Royal Horse Artillery left their barracks at Topcliffe in North Yorkshire and temporarily relocated to Pollestone Camp so they could exercise on neighbouring Salisbury Plain. For several weeks their four AS90 batteries trained around the perimeter of the West Down impact area, firing from every direction at the gutted Saracens and Chieftains in the middle of the Down. On exercise almost everything is as it would be in war, all vehicles are issued with full CES (complete equipment schedules - tools and other equipment

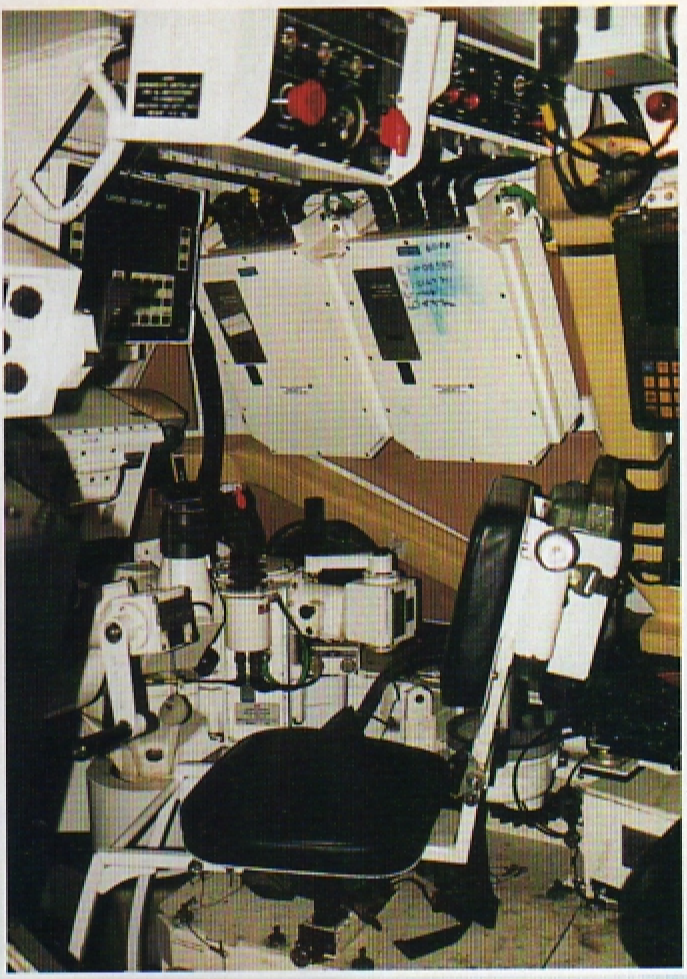


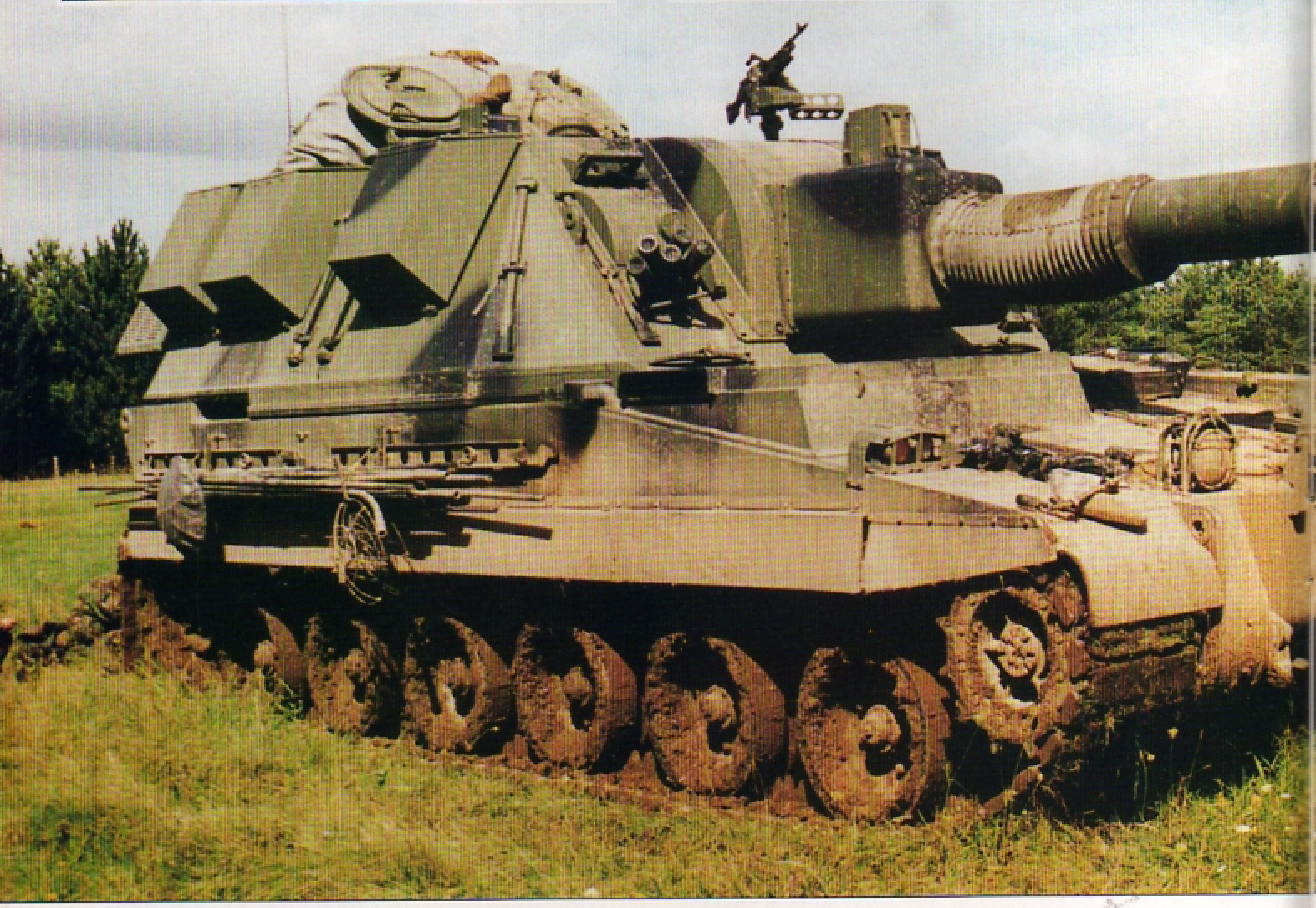


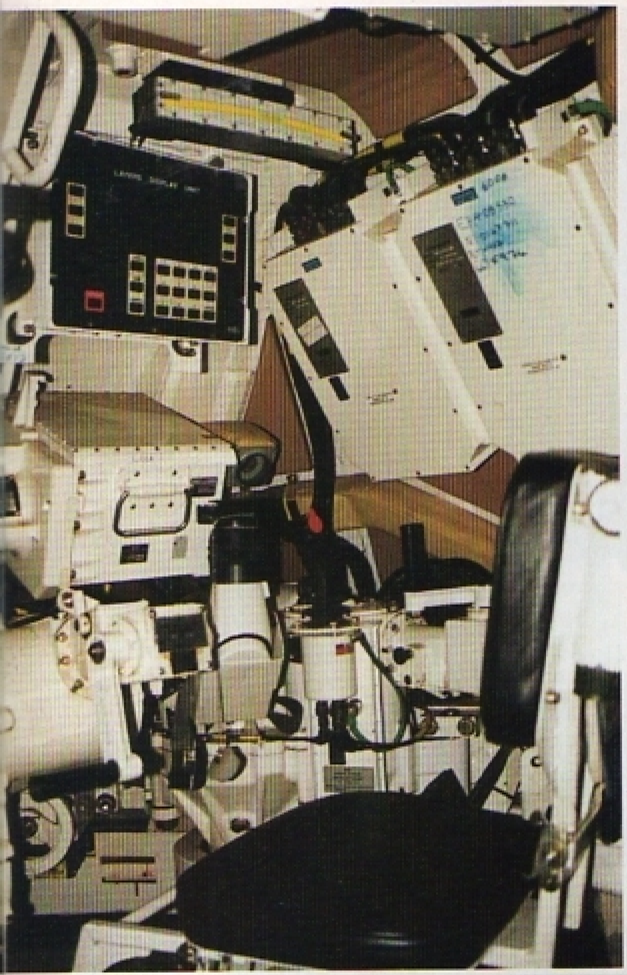
ABOVE: A relatively clean 3RHA AS90 outside Rollestone Camp, on the Southern edge of Salisbury Plain. LEFT & BELOW: AS90 in its natural habitat. Emergency starter leads are slung around the head lights to enable easy access. Vehicle battery failure is not common, but if it does occur it could slow down the entire gun battery.

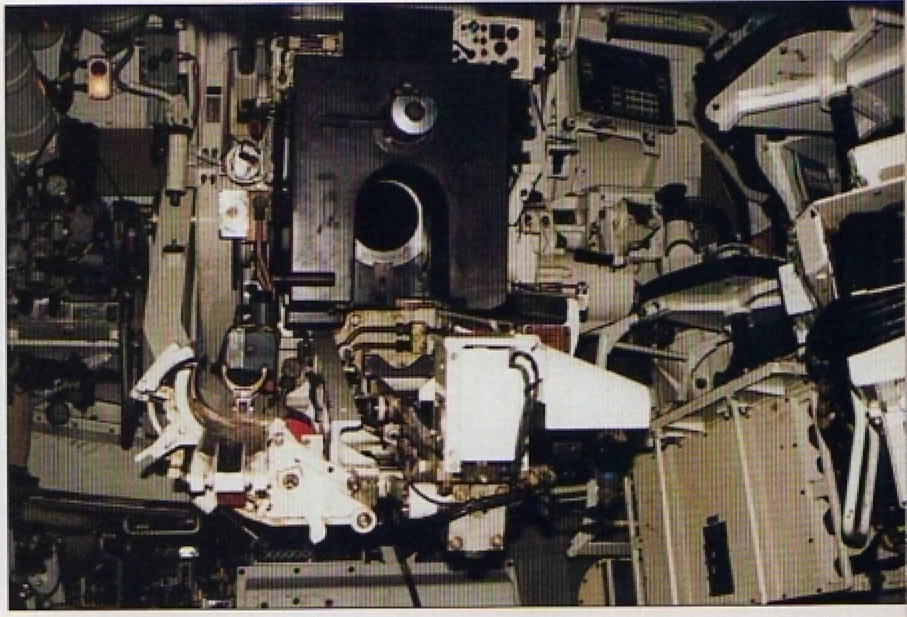




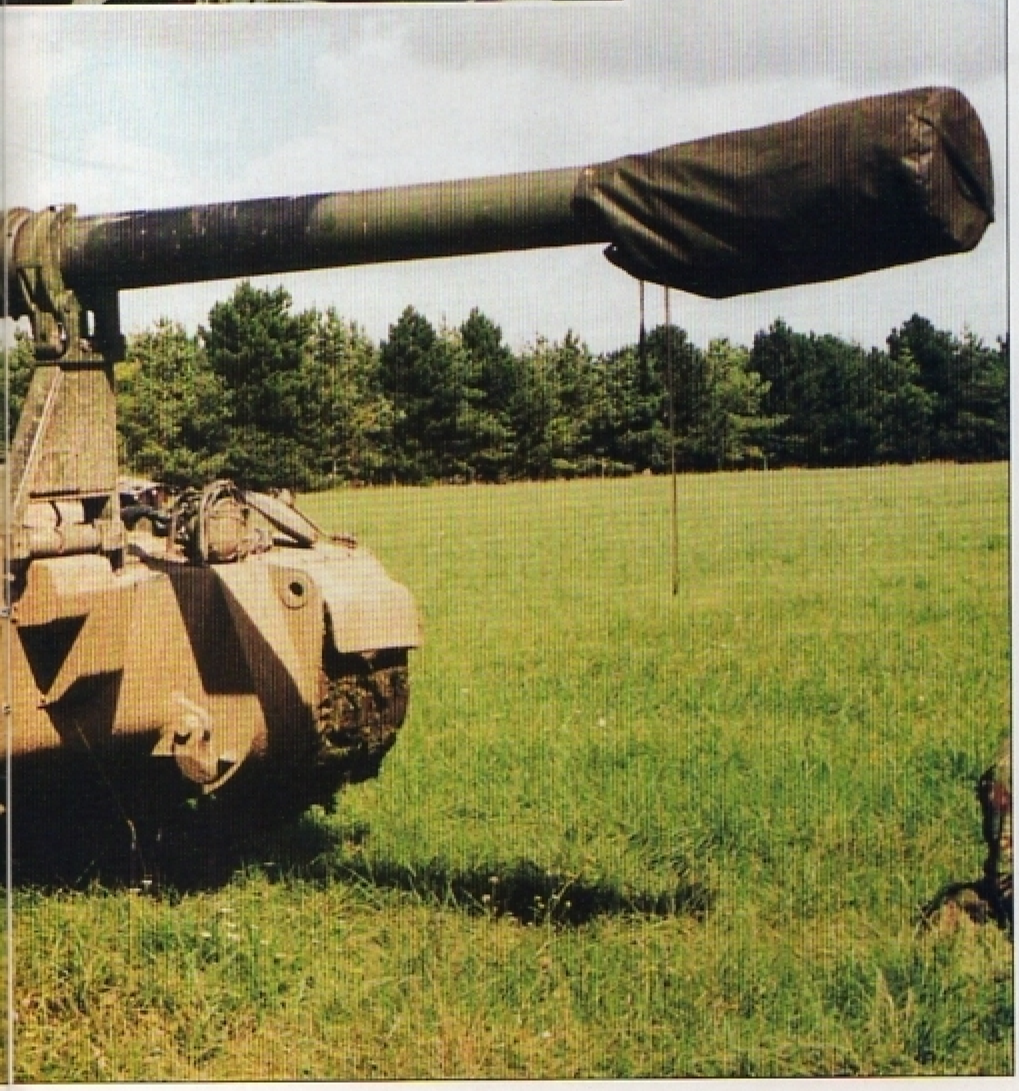








ABOVE: The L131 howitzer breech and flick rammer. LEFT: The Gun Layer's position. BELOW LEFT: An AS90 from 'C' Battery, 3rd Regiment Royal Horse Artillery, with a single day's mud on it - modellers of AS90 (Accurate Armour and Cromwell Models) please note. Camouflage netting and hessian are stowed on the top of the turret whilst the poles and pole tops are tied to the track fitting rails on the side of the hull. Head lights are kept dirty and mirrors turned down to prevent unwanted reflections that might expose the guns' positions.



required in combat) and every detail is carried out 'by the book', the meticulous camouflage routine is but one example.

There are a few things that are not the same, such as the presence of safety officers whose conspicuous white arm bands and absence of combat gear ensure that they gain the attention of those on the exercise. Throughout the exercises they can be seen checking the bearing and elevations of the barrels (from the outside) to ensure that they are pointing in the right direction.

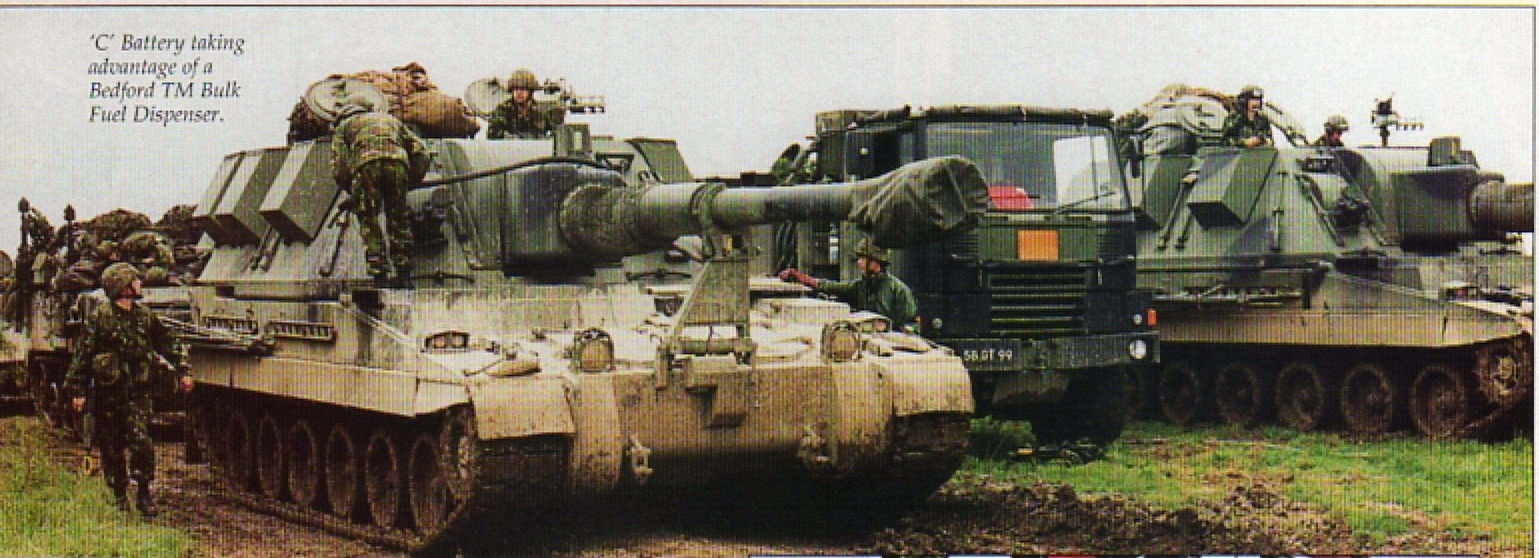
Another difference is the munitions used. Firing guns is the easy part of the Royal Artillery's role so, whilst on exercise, a much greater emphasis is put on other skills, such as command, control, communications, camouflage, observation, logistics, etc. It is, therefore, not necessary to pump tonnes of high explosive down range. Relatively light ammunition scales are issued and firing is generally 'for effect' only.

The targets don't represent much of a threat so the ammunition used is the cheap, US-made M107 HE round. This is sufficient for training, but is not the preferred choice for combat because its fragmentation properties are inferior to the more desirable (and more expensive) British made ammunition. It is also less popular because of its flat base and short nose which makes it difficult to handle, an important issue when you need to handle large quantities of rounds at great speed.

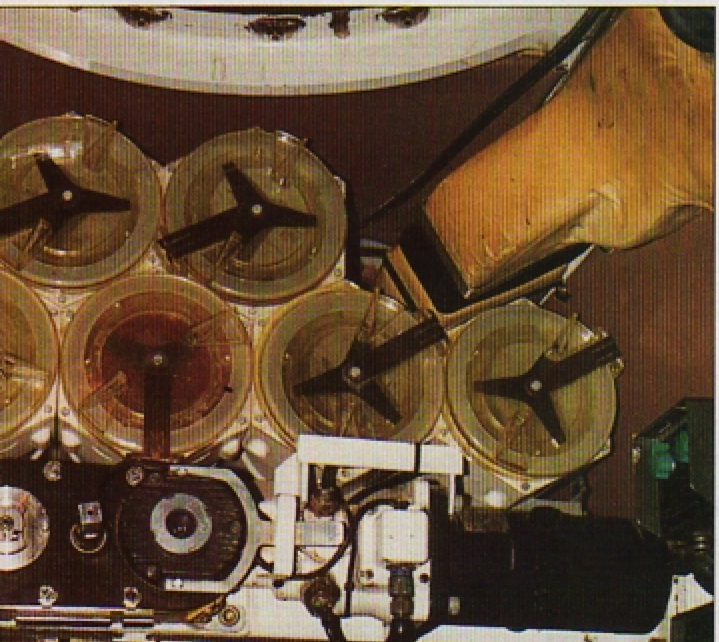
In the photographs an AS90 Battery can be seen making good use of camouflage nets to conceal its position. It takes only four minutes to gather these nets and move off to the next gun position. Although this is very quick, there would be no time to use the nets in an intense conflict where the speed of redeployment to escape counter battery fire is much greater.

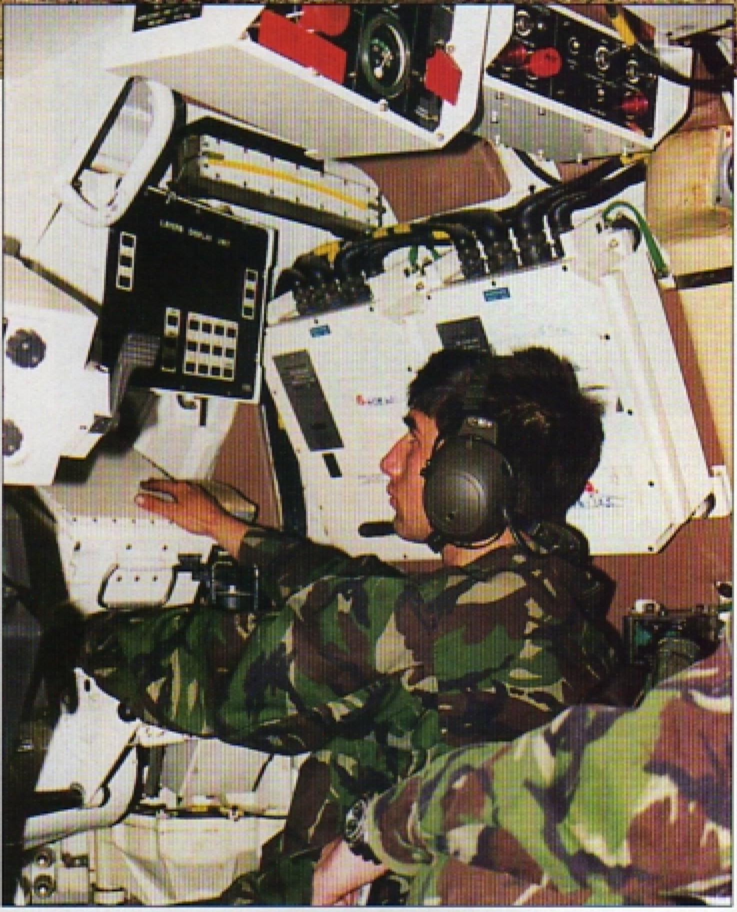
Also shown are other vehicles of an AS90 Regiment that provide support for the guns; these may not be as awesome as the AS90, but they are no less interesting and certainly play a vital role to the overall performance of the Regiment.

Next month we will take a look at an AS90 Regiment deployed on *Operation Lodestar* in Bosnia. ■

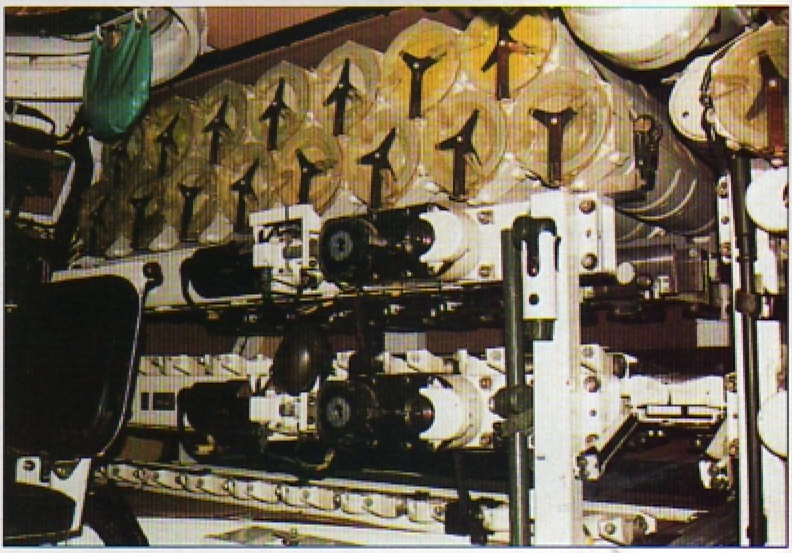


'C' Battery taking advantage of a Bedford TM Bulk Fuel Dispenser.

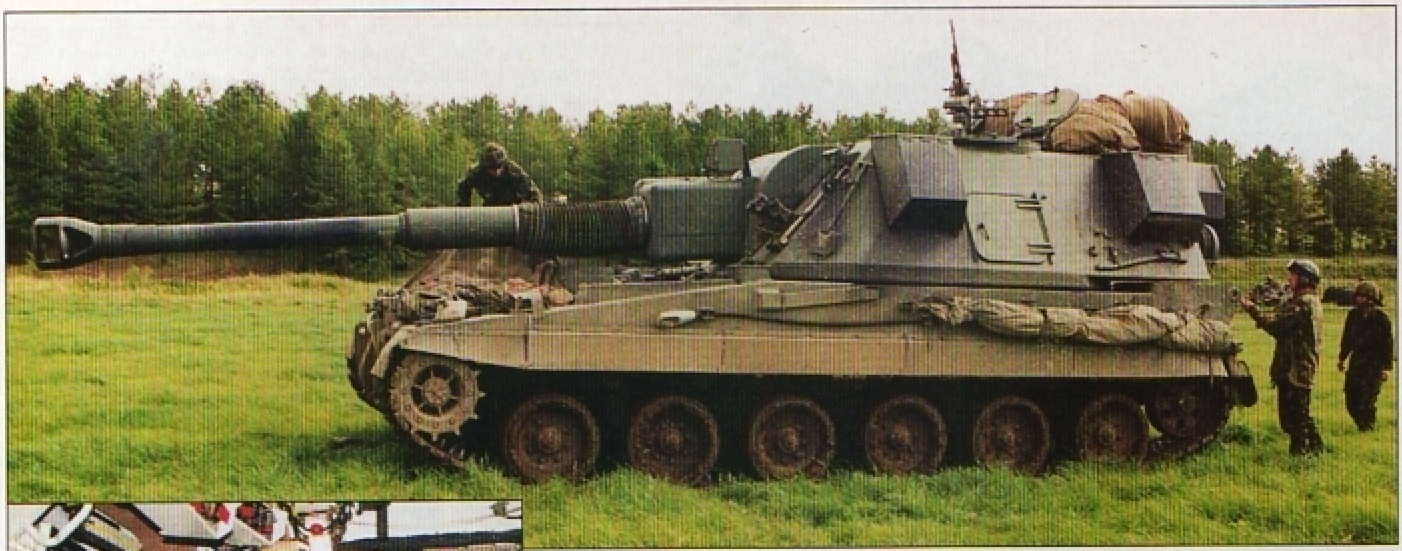


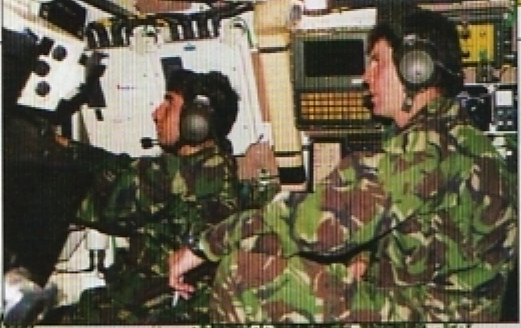


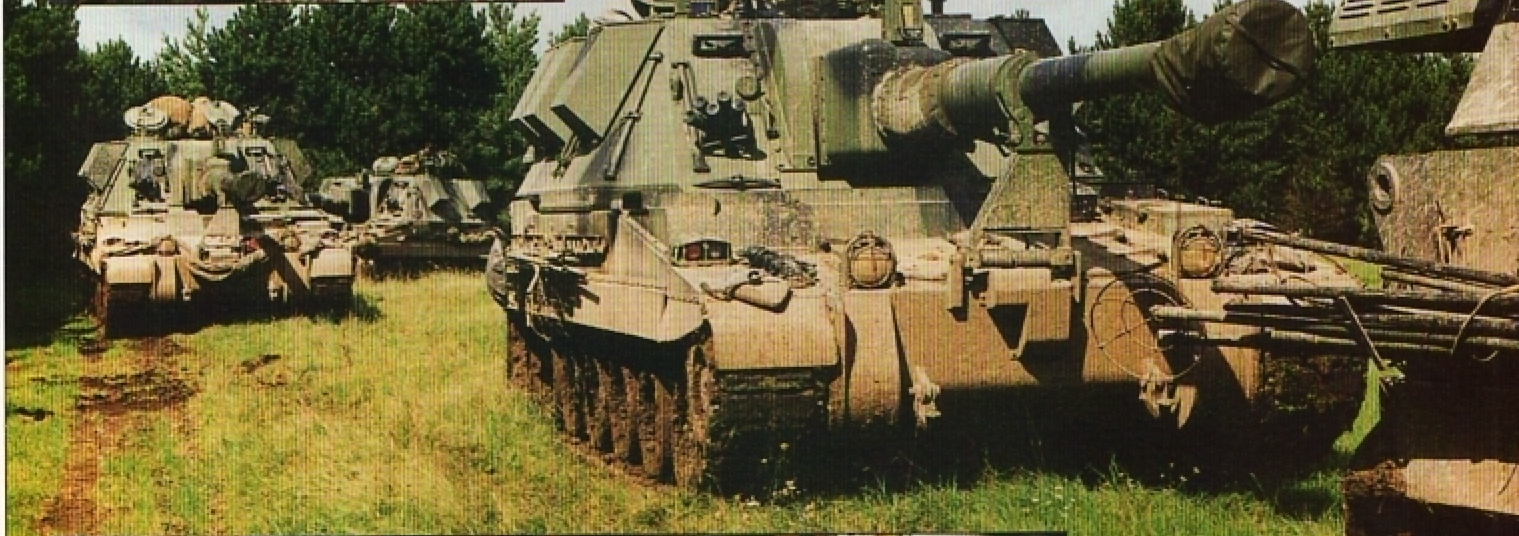
The Gun Layer observes information on his display screen.

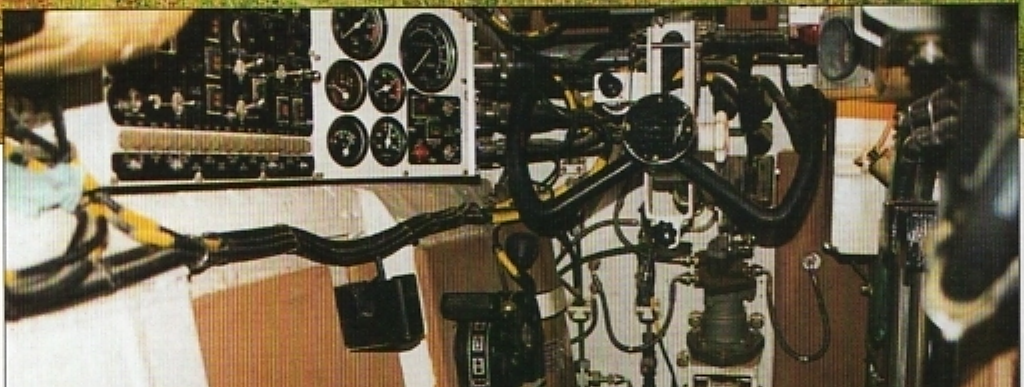


ABOVE & RIGHT: The charge (propellant) rack above and the shell (projectile) rack below in the turret bustle; 31 rounds are stowed in the turret and another 17 in the hull.







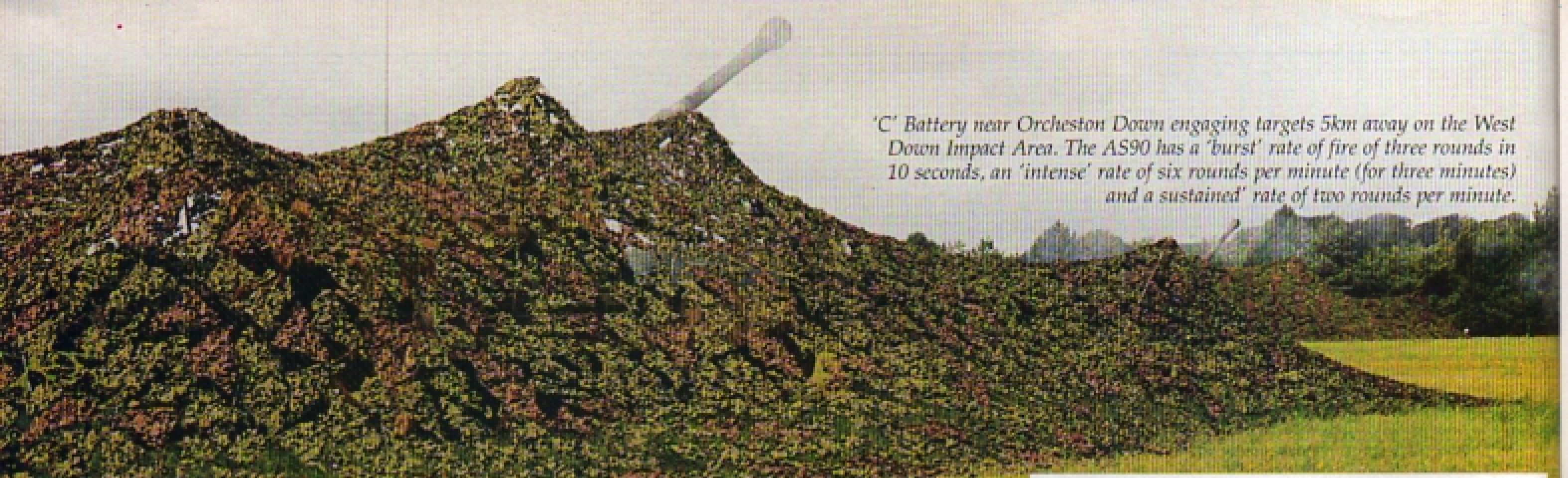


TOP: On, arriving at a new site each AS90 pulls up to a marker stick which indicates its intended position. The markers were placed by the Recce Troop who moved to the site ahead of the rest of the Battery, in FV432s. Note the 7.62mm GPMG has been fitted to its mounting on top of the turret.

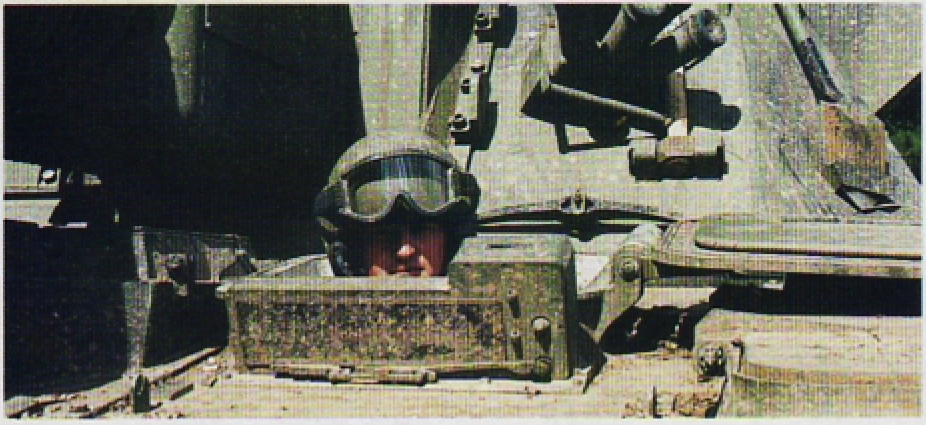
ABOVE: 'C' Battery vehicles parked up during an interval in the exercise.

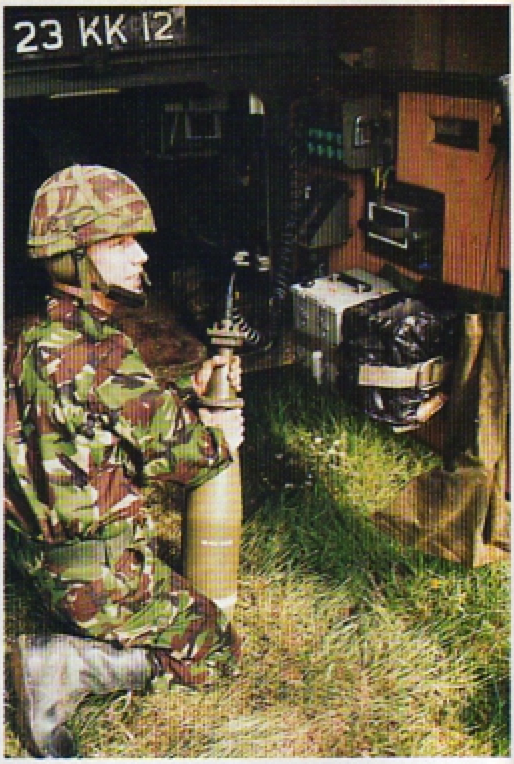
INSET: The Gun Commander, listening to the orders from the Battery Commander and giving instructions to the Layer in front of him; both are watching the computer generated Gun Layer's Display.

LEFT: Driver's instruments and controls.

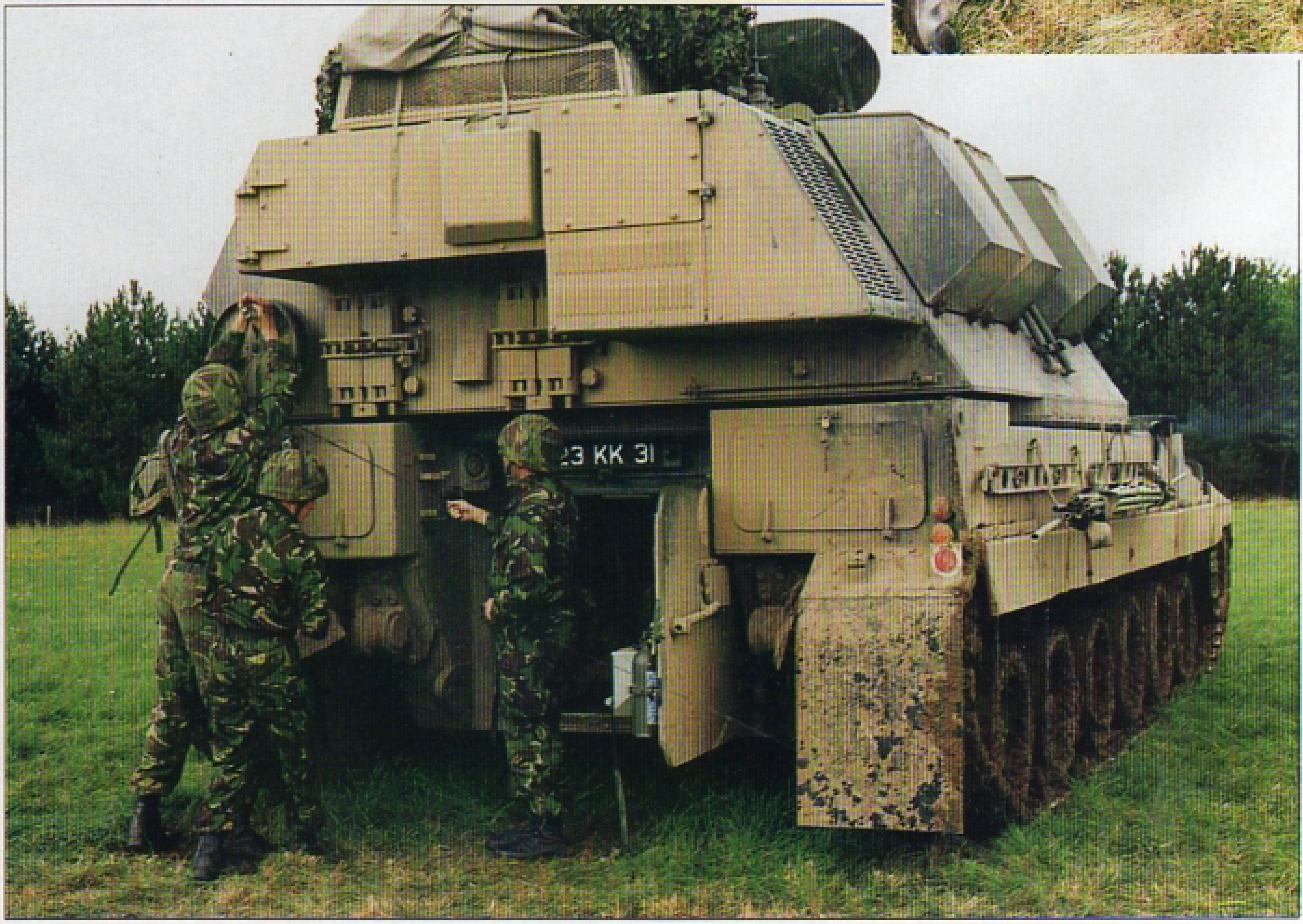


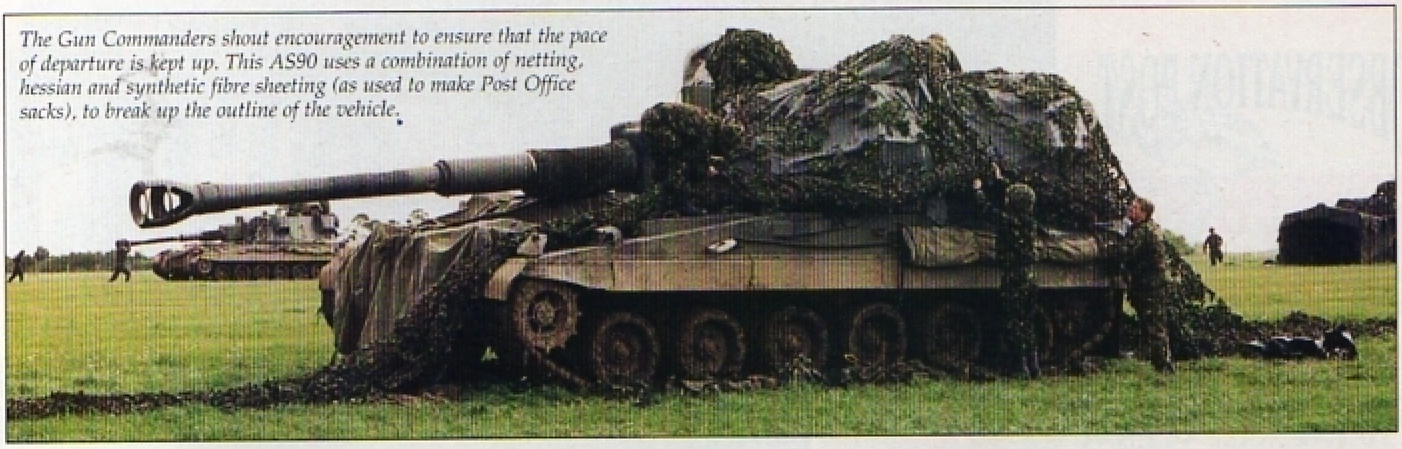
'C' Battery near Orcheston Down engaging targets 5km away on the West Down Impact Area. The AS90 has a 'burst' rate of fire of three rounds in 10 seconds, an 'intense' rate of six rounds per minute (for three minutes) and a sustained' rate of two rounds per minute.



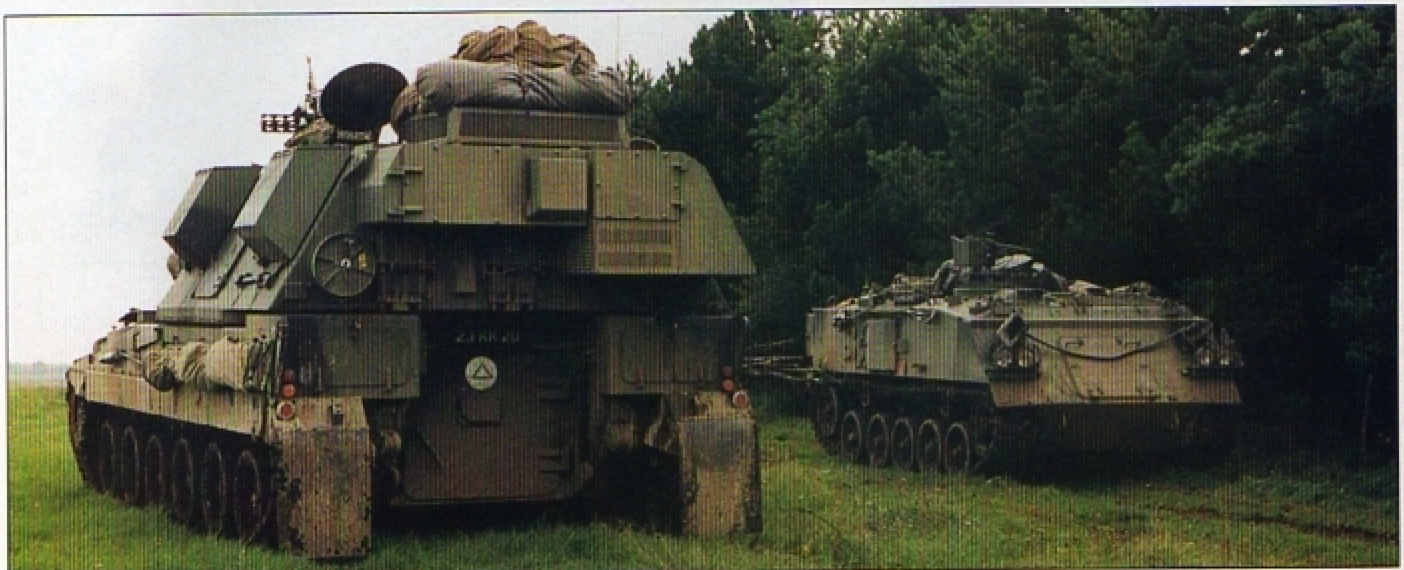


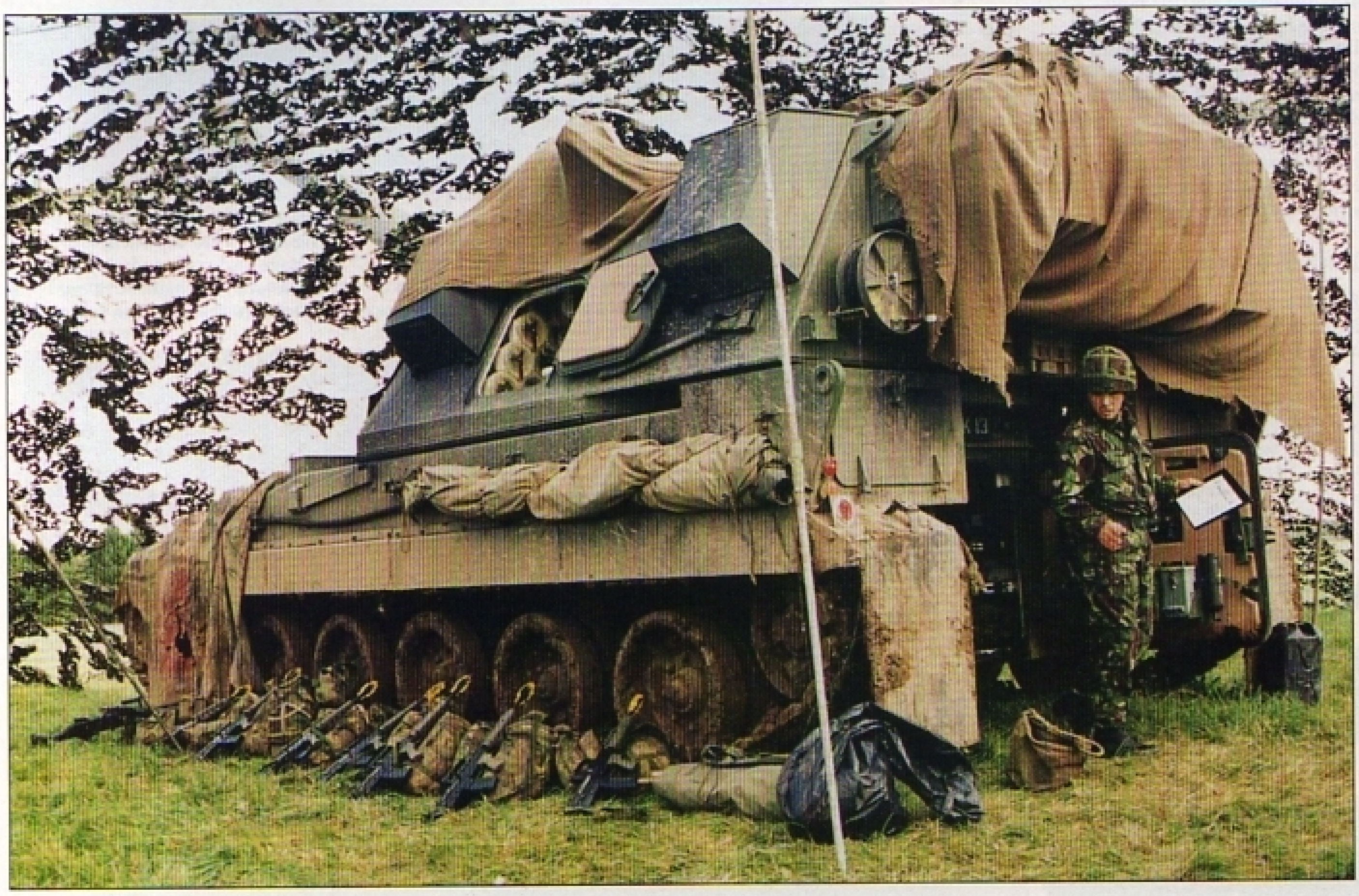
ABOVE: An AS90 Driver, sitting behind his day periscope. A night (image intensifier) periscope is stowed in his compartment and can be fitted within a few minutes. The Driver is wearing the Clansman CVC helmet and Scott goggles; the latter have been standard issue since the Gulf War. RIGHT: A 3RHA Gunner demonstrates the AS90's automatic fuse setter (albeit on an M107 round that doesn't need setting!) The grey box is the prized British 'boiling vessel'. BELOW: Having gathered the nets the crew throw the remaining equipment through the back door and reel in the land line that links the individual guns with the Battery Command Vehicle.





The Gun Commanders shout encouragement to ensure that the pace of departure is kept up. This AS90 uses a combination of netting, hessian and synthetic fibre sheeting (as used to make Post Office sacks), to break up the outline of the vehicle.

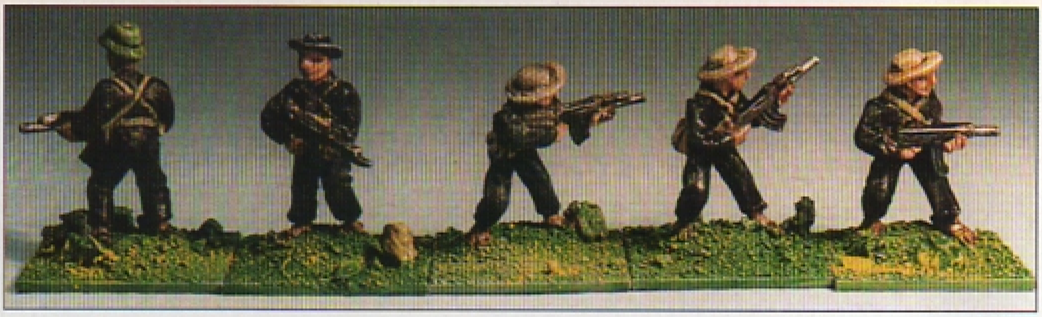




ABOVE: Just inside four minutes the AS90s move off. Note 'C' Battery's triangular tactical sign barely visible on the back of the turret and repeated on the white convoy marker on the back door. BELOW: AS90 under its net canopy with the crew's personnel equipment laid out along the side, with the GPMG and SA80 rifles (L85A1 with yellow blank firing muzzle attachments fitted) most conveniently placed in case of unexpected confrontations.

OBSERVATION POST

NEWS FOR WARGAMERS
BY STUART ASQUITH



Viet Cong/North Vietnamese Army figures for Vietnam in 20mm by the Australian company, The Light Horseman.

20mm Vietnam Range

The Light Horseman (PO Box 107, MacArthur Square, NSW 2560, Australia) produce a range of 20mm white metal Australian and Viet Cong/North Vietnamese Army figures for Vietnam. So far there are 12 Australian infantry figures, armed with either an M60 or an SLR, along with eight VC infantry armed with a variety of automatic weapons and three variously equipped NVA types. There is a mix of static and action poses, and the castings are A$1.10 each. Also available is a bag of either 30 Australian infantry or VC/NVA infantry for A$30. These are highly suitable for the *Buckle Your Dust* Vietnam rules which are also available from The Light Horseman for A$19.95. Postage and packing on all orders is 10% Australia, 20% New Zealand, 20% elsewhere (sea) or 40% (air).

Russian Church

The Queen's Hussar (32 Jubilee Avenue, Headless Cross, Redditch Worcestershire B97 5HE. Tel: 01527 545101) now include have a splendid Russian church in their range of 20mm WWII resin buildings and fortifications designed by Richard Marsh and Colin Rumford. With a lift-off roof and dome, the church is a substantial model which is ideal for use in most periods and theatres.

Obidiah's Army

Obidiah's Army is a recent Flintloque scenario pack from Crescent City Industries Limited (High Langmuir, Kilmaurs, Kilmarnock, Ayrshire KA3 2PG. Tel: 01563 520222). The motley crew includes 'General' Obidiah Hogswill himself, along with a selection of 15 other really mean characters - ideal for one side of a Peninsular skirmish. The box also provides a nice start to a completely mercenary army and retails at £19.99. Rules, scenarios and a painting guide are also included.

ABOVE: A selection of figures from a range of 25mm castings which are designed for the First Italian War of Independence, by Australian company 1848 Productions. LEFT: The Russian church from The Queen's Hussar.

Napoleonics from Old Glory

Old Glory Corporation (Institute House, Sycamore Terrace, New Kyo, Stanley, County Durham DH9 7TJ) now have a British infantry 1809 command pack 25mm castings. There are five colour bearers, five sergeants, five drummers and five officers, all in different poses. To complement these is a pack of 30 British centre company men 1809 in the march attack position. Also new is a pack featuring 30 Grand Duchy of Warsaw Elite Company infantry at the march attack.

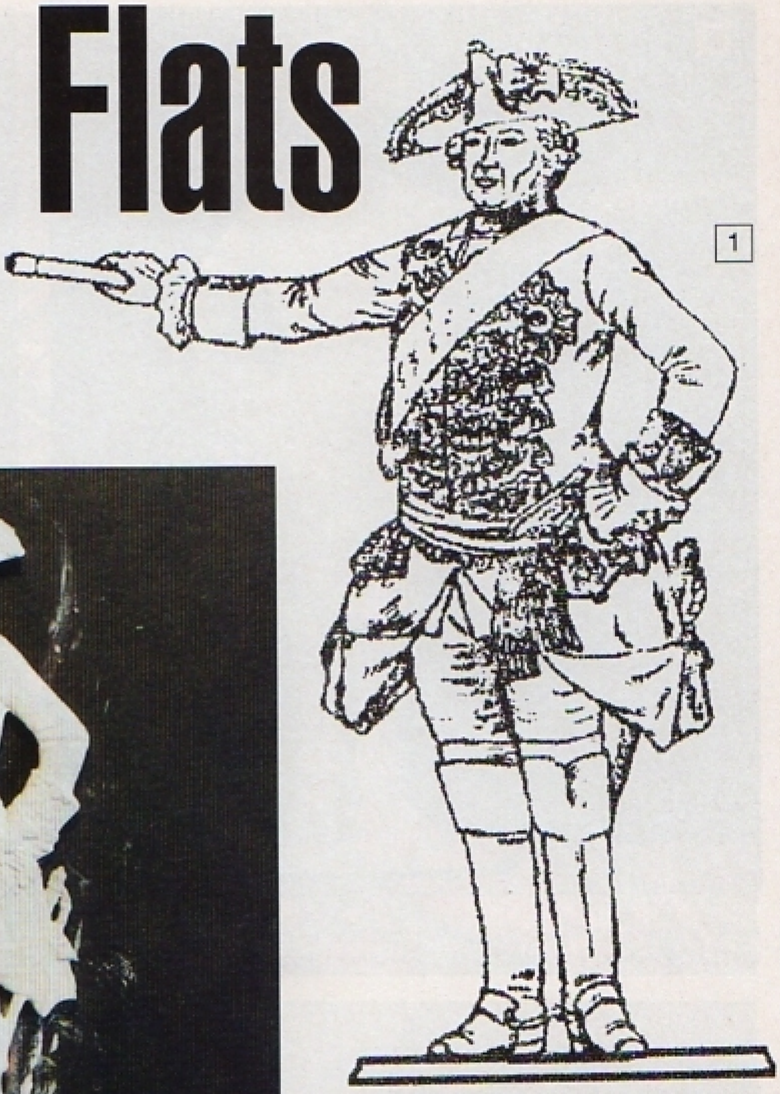
1848 Productions

Stuart Penhall (2 Broad Street, Prospect 2149, New South Wales, Australia) offers a range of 25mm castings which are designed for the First Italian War of Independence 1848. To date there are Austrian, Modena, Piedmontese and Tuscan infantry in a variety of styles. The figures are 40p each, with postage and packing being 30% surface, 50% airmail. Artillery figures are scheduled to follow. ■

RIGHT: British Napoleonic infantry 1809 from Old Glory.
BELOW: Grand Duchy of Warsaw Napoleonic elite company infantry by Old Glory.

Focus on Flats

Graham Dixey begins a new series for would be flat figure painters



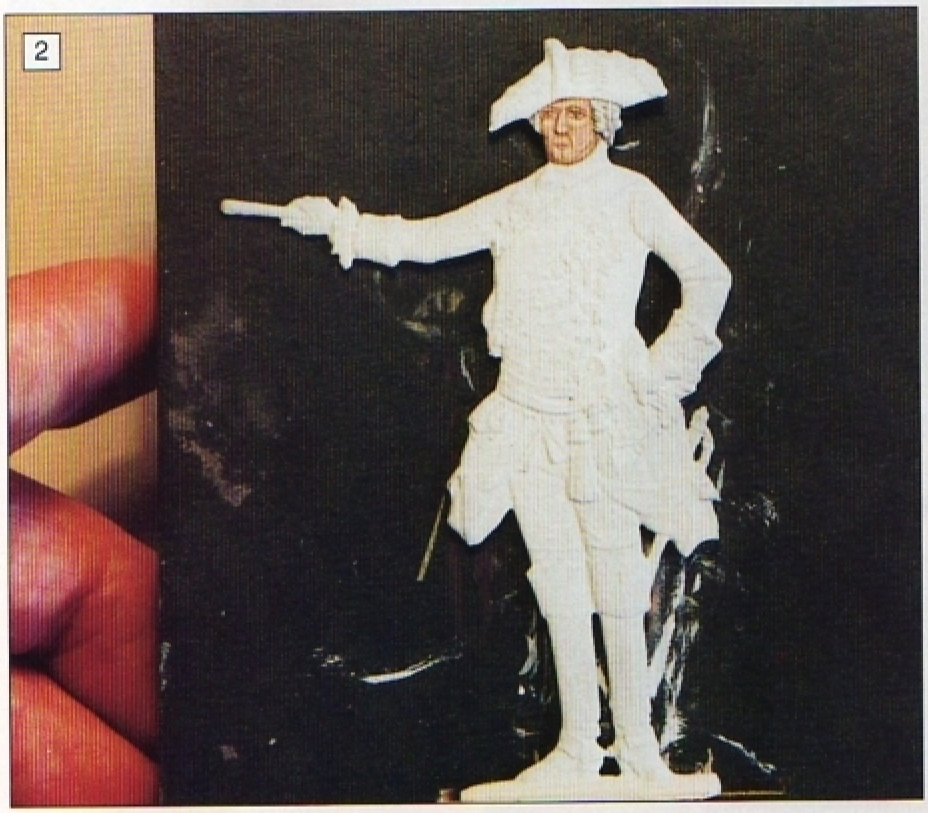


Fig 1: Historia Müller's Frederick the Great. Fig 2: Using a black card mount to hold a flat.

If you ever wanted to paint a flat figure or have had a go and weren't quite happy, then this series may be for you. What I aim to do in the opening parts of 'Flats in Focus' is to introduce you to the techniques of preparing, painting and displaying flat figures.

For the painting demonstrations in parts Two and Three, I shall use the Historia Müller large scale flat of Frederick the Great, one of my favourite historical personalities **(Fig.1).** However, before we start painting, there are some basics to discuss. If you already use artists' oil paints, then you may feel that some of what I have written can be skipped. Even so, it may be worth a skim through to pick up any points peculiar to flats.

What points, for example?

The main difference between flat figures and round figures is pretty obvious. Most flats are no more than a few millimetres in thickness. That means that they can only be viewed from two specific angles - directly from the front or the back. I have seen flats put into dioramas at funny angles. Believe me, it doesn't work. Let's accept the fact right from square one that the illusion of depth can only be created by the skills of the painter. And that really encapsulates the difference between the two types of figure. The round figure already has three dimensions; highlighting and shading it merely accentuates its solidity. It is perfectly possible to paint exquisite round figures without any highlighting or shading at all.

Let's now spend a few minutes considering the equipment that we need.

Choice of Paints

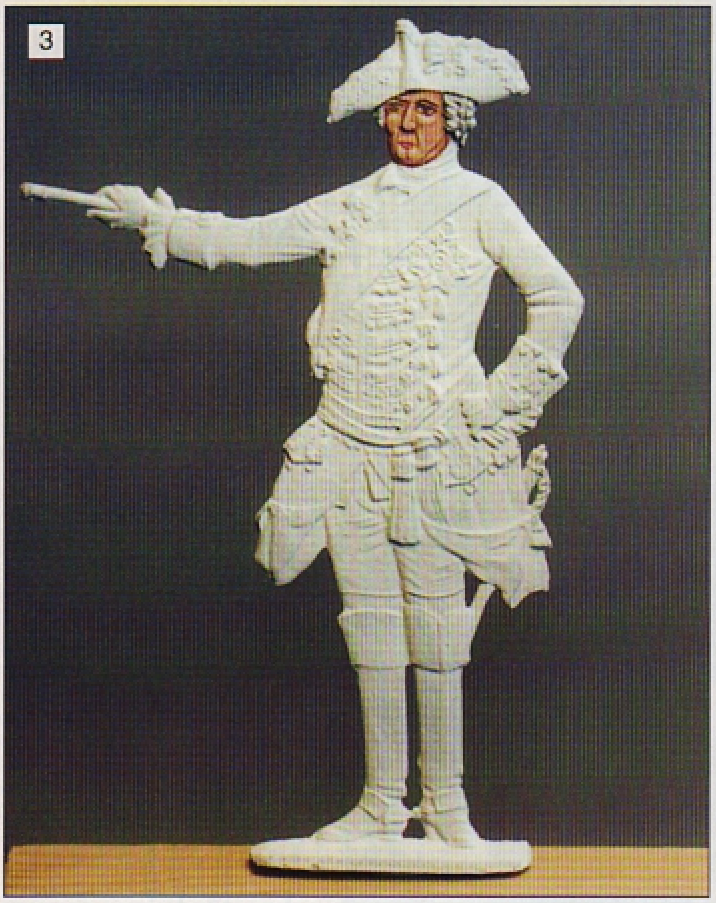
I am going to make one assumption now, that we are using artists' oils. There are people who paint flats successfully with enamels, gouache and water-colour, but most, like me, use oils. In the UK, if you go into an art shop the usual choice will be Winsor & Newton or Rowneys. Their paints are fine, the artists' quality being superior to student quality, but costing more. The other big brand to watch out for is Rembrandt, made by Talens of Holland (obtainable from Cross's of Folkestone). One advantage of the latter brand is that they are also available in 17ml tubes, which are relatively cheap. All makers have a wide range of colours, some with exotic names, but you can do a lot of painting with a small initial selection as follows: *Titanium White; Yellow Ochre; Burnt Umber; Burnt Sienna; Ivory Black; Winsor Red (or equivalent in other ranges); Alizarin Crimson; Winsor Yellow (or equivalent); Prussian Blue; Cobalt Blue; Ultramarine Blue.*

No greens are included as they can be mixed from blue and yellow; the same applies to orange (red and yellow) and purple (red and blue). With experience you will learn to mix a whole range of subtle colours including grey (which is not always just a mixture of black and white - far from it).

I should just mention price: it depends upon the colour and varies enormously. Any paint starting with the word cadmium will be expensive. On the other hand, the earth colours (ochres and siennas, etc.,) are quite cheap.

Mediums

Don't buy either pure turpentine or linseed oil; many tubes of paint have more than we need anyway. Often you don't need a medium at all, if the paint is right straight from the tube. Otherwise, you might try Winsor & Newton's Liquin or Matt Medium. Liquin gives a slight sheen, which I find attractive. Oils never have to have a high gloss and if



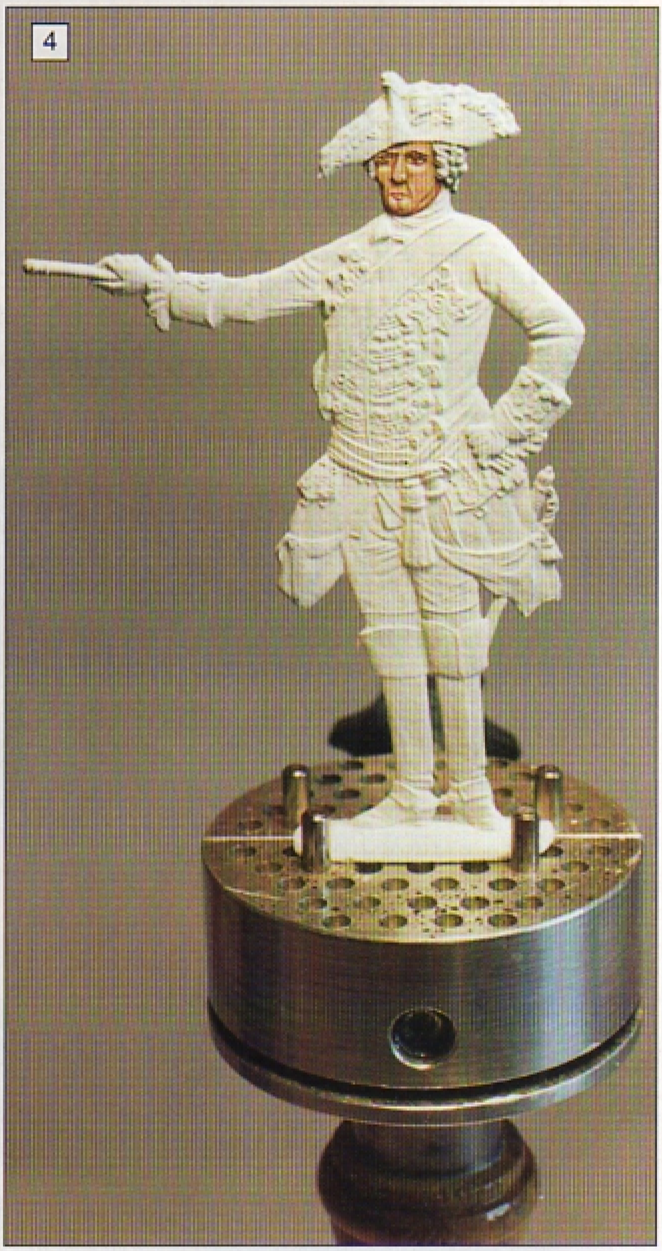


Fig 3: A home-made mount for painting both sides of a flat. Fig 4: The 'universal workholder', a more sophisticated way of holding a flat for painting.

that's what you get, you're doing it wrong.

What is meant by the right consistency? First, there should be no obvious oil surrounding any paint you put out. If there is, putting the same paint onto blotting paper first will remove it. If you can't push the tip of a very fine sable into it easily, it's too thick. You'll know better when you start to paint. If it's too thin, the coat will appear watery and lacking in depth; if it's too thick, you'll have a job getting the paint to cover smoothly.

Some painters use white spirit as a medium. I find a spot of it useful for thinning paint for fine line details e.g. uniform lace, eyes, etc. Otherwise it's what I use to clean my brushes.

Brushes

For a lot of the time the only real choice is a good sable; at all times use only good quality artists' brushes and avoid those sold for general modelling.

The sables I like are: Winsor & Newton series 7 Finest Sable size 000 for fine work; Winsor & Newton series 3A Designers' Sable sizes 0 and 00 for general work; Winsor & Newton series 16 Sable sizes 1-5 for larger areas. Pro Arte series 2A Kolinsky Sable sizes 2/0 and 3/0 for fine work.

Expect to spend perhaps £5 per brush for some of the above.

Useful synthetics include: Winsor & Newton Cotman series 666 size 1/8in (a flat brush) and Winsor & Newton Cotman series 111 size 3, for example, for larger areas, etc. These brushes have attractive blue handles and are much cheaper than sables.

Always rinse brushes well in white spirits after use, then wash with soap and water, dry on kitchen towel and dip into lanolin (cold cream). Draw the hairs to a fine point and stand upright in a pot. Wash out the lanolin in white spirits at the beginning of the next session.

Palette

Just another name for somewhere to put your paint and mix it in use. Alternatives include ceramic tiles, offcuts of aluminium sheet, tin lids and, in my own case, pieces of parchment palette sold as such in art shops; usually in A4 blocks, they can be cut down to smaller sizes. For mixing paint, use wooden cocktail sticks. Have nearby an old piece of rag for wiping brushes when cleaning them.

Preparation for Painting

As is the case for all white-metal figures, flats have some flash. This can be removed carefully with a sharp modelling knife and the edges of the flat cleaned up with needle files. I then usually buff the surface with a brass suede brush (from shoe shops) before degreasing it in vinegar and drying on kitchen towel ready for priming.

For painting the usual primer is matt white enamel; give a couple of coats, hand-brushed or air-brushed, allowing drying time between coats. Dust is one of the biggest enemies of the flats painter. Never leave a wet figure in the open, but cover it between sessions. I use one of those shallow plastic trays that some small supermarket vegetables come in. Nearby at all times is a pair of fine tweezers to pick off any tiny hairs that settle while I am working. You'd be surprised just how many there are around!

Holding a Flat for Painting

I have shown here three ways of supporting a flat while it is being painted. If you only intend to paint one side, a convenient way is to have it more or less flat on your work surface, just as you might a drawing or painting. take a rectangle of cardboard, cover it with black paper (or paint it with black poster colour) and cut a slot for the base of the flat, using a small piece of Blu-Tack behind the flat to keep it still **(Fig.2).**

You can prop up the back edge of this piece of card with a strip of wood or even pick it up in the palm of the hand as seems appropriate. If you intend to paint both sides of the flat, then you need access to both of them. A simple painting stick, made of 3/4in dowel for the handle, with a strip of wood on the top, forming a 'tee', is cheap and easy to make **(Fig.3).** Secure the flat with a bit of Blu-

5

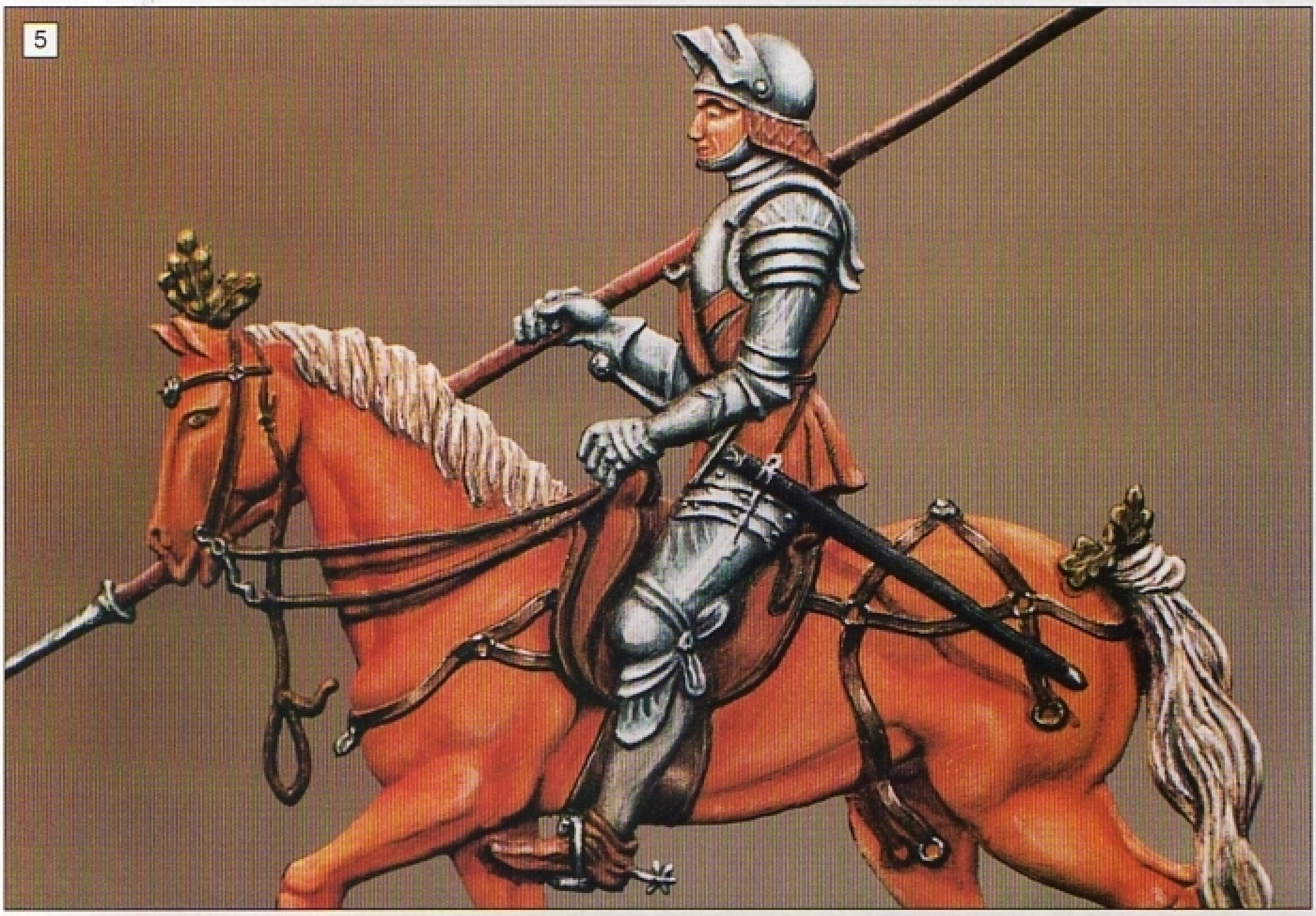
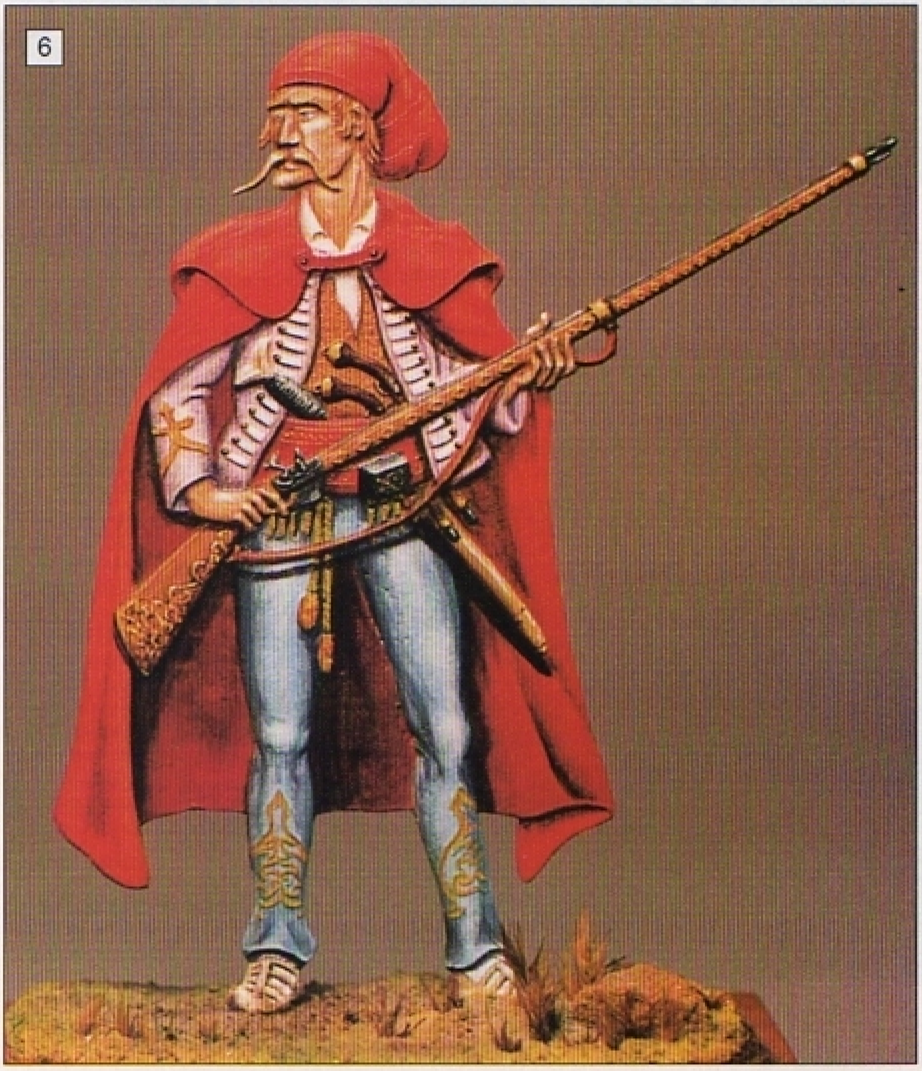


Fig 5: Note the 'cast' shadows of the reins and sword scabbard. Fig 6: More cast shadows (weapon sling and scabbard); note also the feeling of depth in the cloak due to shading.

6



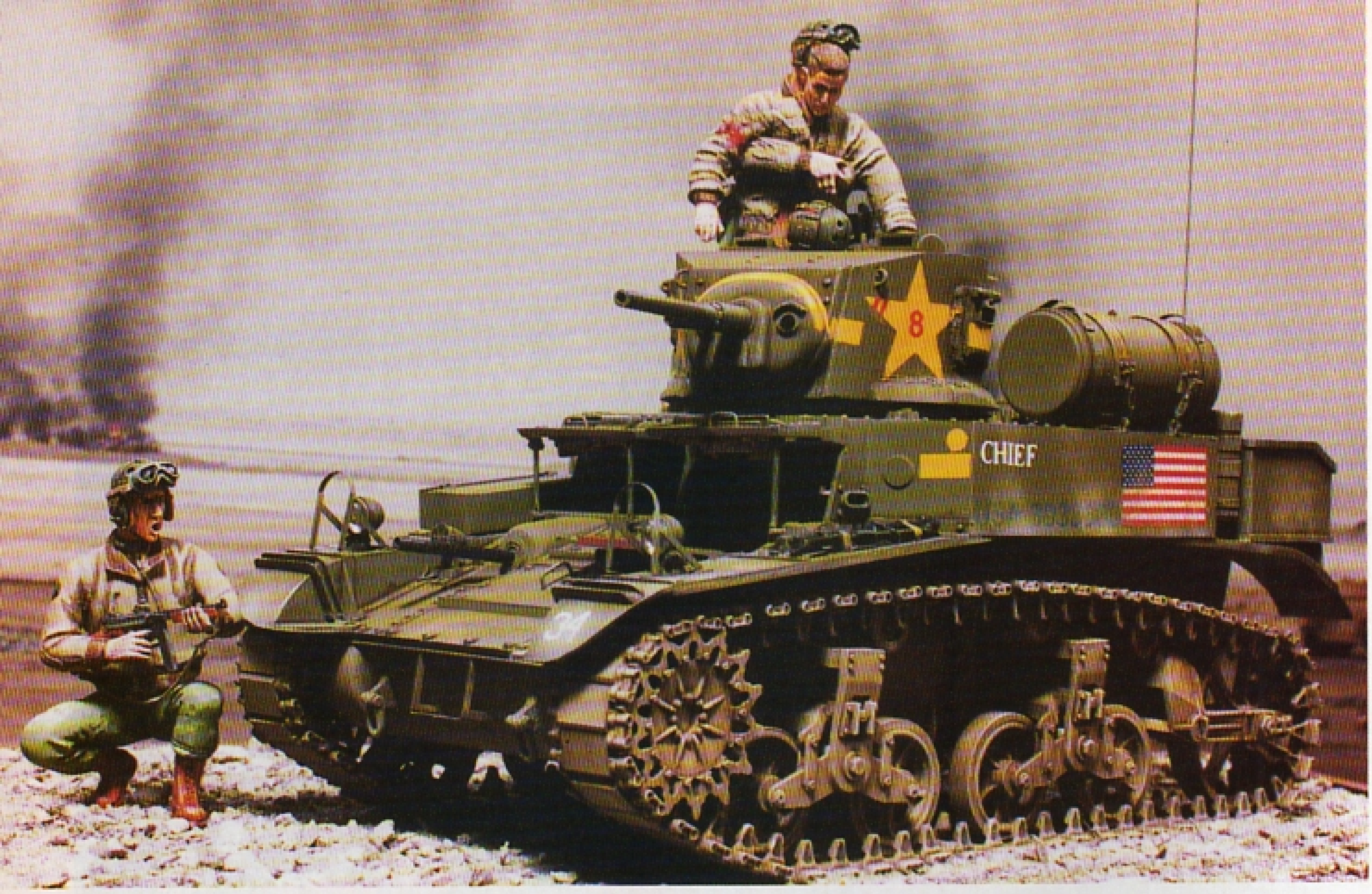
Tack. If you're feeling affluent, you might invest in a 'universal workholder' (from Proops) as shown in **Fig.4.** These are adjustable for all base sizes, including round figures, parts of model vehicles, etc.

Controlling Light and Shade

The 3-D effect that the successful flats painter achieves is based upon understanding how the light that falls on a figure creates areas of highlight and areas of shadow. When we think we know whereabouts on our figure these areas lie, then we apply highlighting and shading tones to the figure and create the sense of depth.

Another trick is to include the cast shadows, an aspect often overlooked even by experienced painters. Any object that lies between the light source and the figure will cast a shadow onto the figure. Including this shadow will heighten the feeling of depth enormously. Look at the examples opposite in **Figs.5** and **6** to see what I mean. In both cases, look not only for the general areas of shadow, but for the cast shadows as well. In the case of the knight, both the reins and the sword cast shadows onto the horse (following its curves) and, in the case of the Croat, shadows are cast by the sling and the scabbard. In both cases the light is assumed to come from the upper right and slightly in front of the figure.

That's all for now. next time we start painting a figure. ■



Kasserine Stuart

Steve Zaloga shows how to improve Tamiya's M3 Stuart Light Tank

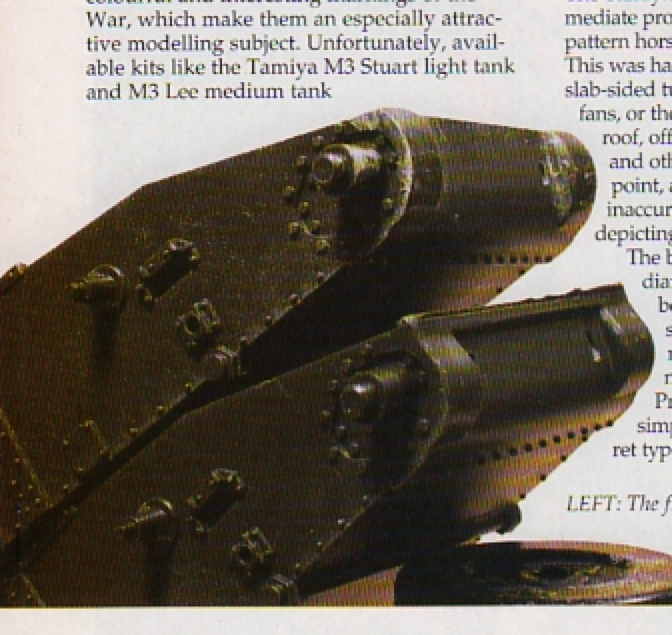
The US Army's 1st Armored Division suffered a painful baptism of fire during its encounters with the *Afrika Korps* at Kasserine Pass, during the North African fighting in early 1943. I decided to depict a scene from that battle.

US Army tanks from the 1942-43 North African campaign have some of the most colourful and interesting markings of the War, which make them an especially attractive modelling subject. Unfortunately, available kits like the Tamiya M3 Stuart light tank and M3 Lee medium tank are old, and not up to current standards. Yet with a modest amount of work, they can be significantly improved. I decided to model an M3A1 Stuart light tank of the 1st Armored Regiment, 1st Armored Division based on the older Tamiya kit.

The Tamiya kit

The Tamiya M3 Stuart kit represents an intermediate production M3 light tank with the first pattern horseshoe turret with the high cupola. This was hardly an ideal choice, as the earlier slab-sided turret so familiar to British Honey fans, or the later horseshoe turret with the flat roof, offer a wider range of colour schemes and other possibilities. This is a moot point, as the kit turret is so dimensionally inaccurate that it must be replaced, even if depicting this variant.

The basic problem is that the kit turret diameter is too small, and this cannot be easily corrected. The early slab-sided turret is available as an aftermarket conversion from several manufacturers, including Verlinden Productions. Also, it is a relatively simple project to scratch-build this turret type. The final horse-shoe turret with the two roof hatches was used on the final production run of M3 Stuarts (called Hybrid Stuarts in Britain), on the M3A1, and on the M5 light tanks. Surprisingly, there have been few conversion kits designed for this version. Commanders Models did a conversion set some years ago, and I managed to pick one up at the AMPS convention in Aberdeen, Maryland in April 1997. It is one of Commander's older releases and not up to their current standards. Nevertheless, it provides a good basis for this conversion, and provides most of the major elements of the conversion.

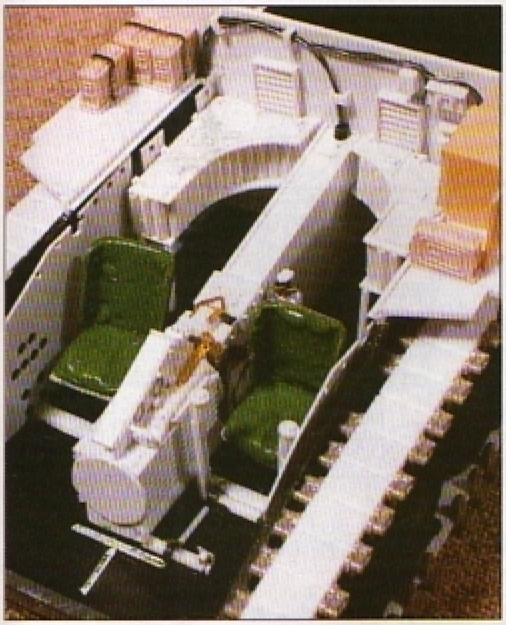


LEFT: The front transmission covers on the Tamiya Stuarts are poor and need work. The original kit is shown below, while the revised housing is shown above.

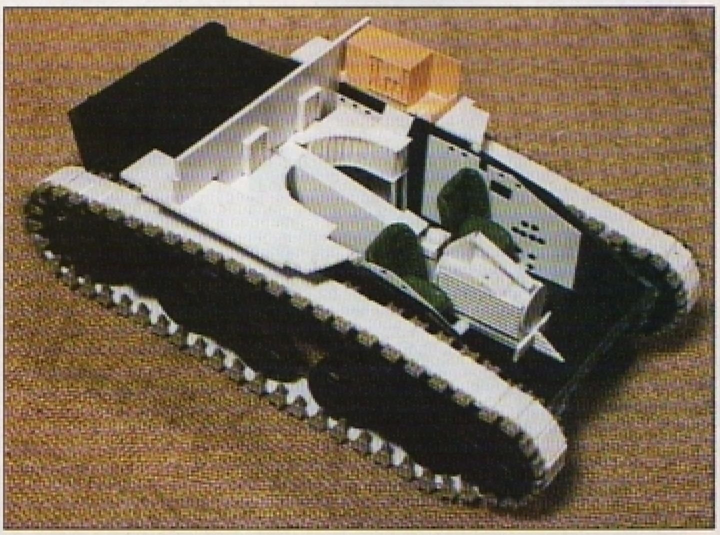
Planning the conversion

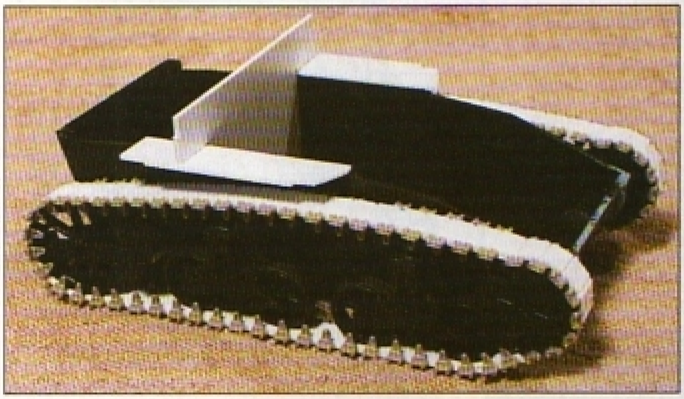
I decided at the outset that I wanted to place my M3A1 in a small diorama showing a crew bailing out from a disabled tank during the Kasserine Pass fighting. This had several consequences on planning the model. First of all, it meant that the hatch on the turret would have to be open. This was a problem as the Commander's turret is moulded solid. However, if I had to carve open one hatch, I decided I may as well open the other hatch and put in a rudimentary interior. Things started to get out of control, and I decided to leave open the front two hatches, requiring some hull interior!

The Stuart is a relatively simple tank inside, and the restricted opportunities to view the interior meant that many details could be simplified. I had adequate references in my files, as the *Stuart in Action* book for Squadron Signal had been one of my first book projects. I had located several technical manuals, parts lists, and Ordnance Department drawings which showed the fighting compartment. I also photographed the M3A1 light tank held by the Patton Museum in Fort Knox many years ago, though not as thoroughly as I now wished! Richard Hunnicutt's massive volume on the Stuart is also a 'must-have' for anyone planning to build a model with an interior. With references in hand, I now started the conversion.



ABOVE: A close-up of the interior before painting. At this stage, the small detail including the driver's controls, the ammunition stowage and the firewall wiring harnesses have been added. RIGHT: The basic interior components in place. The most complicated elements are the transmission final drive, the seats and the ammunition racks. BELOW: The hull after attaching the suspension and beginning to add interior bulkheads. The new track is most evident in this view. The sponson floors are notched to fit the kit parts.





The transmission cover

All the Tamiya Stuart kits have very poor front transmission covers. The shapes do not accurately represent the real vehicle. On the M3A1, the simplest solution short of scratch-building a new cover is to remove the horizontal bar running between the two transmission bulges, and add some more material to the upper half of the bulge to give it a more rounded shape. I used some plastic from the kit, and then carefully reshaped the bow with files and sanding paper.

The suspension

The Tamiya suspension is one of the best elements of the old kit, with the exception of the track. I cleaned up the suspension bogies, with only a few small detail enhancements. The big problem here is the track. Tamiya moulded the end connectors on the middle of the track pads, not between the track pads as they should be depicted. They are not well detailed tracks anyway, so I had decided at the outset to replace them.

One solution is to use available after-market resin track. I used Accurate Armour Stuart track on an M5A1 Stuart some years ago. However, I decided on another approach for this model. With the recent spate of DML/Dragon Sherman kits with their individual link track, I retrieved a set of Model Kasten Sherman track from the larder to compare them. The guide horns on the Model Kasten track are noticeably smaller than the DML examples, and more suitable for the Stuart.

For the track itself, I rummaged through the selection of Evergreen Plastic scribed styrene plastic sheet at a local hobby store, and found a .40 thou sheet with grooves close to those required for the Stuart. I designed the track so that the scribed side faced outward depending on where the track was located. Some parts of the track, such as the upper run, and the run from the drive sprocket, have both sides visible. On these sections, I added another layer of .15 thou plastic pads to replicate the back side of the track detail.

For the drive sprocket and idler, I cut the pads apart to help give them the proper curve. I am very happy with the results, and have plenty of guide horns left over from the Model Kasten set. AFV Club in Taiwan has begun to advertise future sets of Stuart tracks, so modellers may wish to wait until these become available before tackling this feature.

The interior

I'm not going to go into a lot of detail on building the interior, as I suspect that very few modellers will actually attempt such a project. The first stage was to close in the hull, as the kit has the usual Tamiya problem- a lack of sponson floors. I added the sponson floor along with an engine bulkhead. I then began preparing several sub-assemblies for the interior including the transmission train, the ammunition racks, the interior insulation panels, and the seats. All of these were made out of sheet styrene plastic except for the seats.

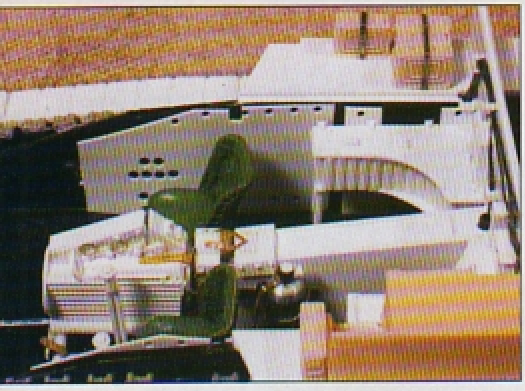
The seats consisted of three main elements, a basic plastic seat, a sheet brass curved seat back, and an epoxy putty cushion. The seats are the most visible item from the open front hatches, so a little extra effort is warranted. The kit radio was a resin example from the spares box, and the .30 cal Browning ammunition boxes are from Verlinden. The wiring on the aft bulkhead is thin lead wiring used by fishermen for tying flies. I made the fire extinguisher by turning some aluminium rod in a lathe. The interior does not have to be completely detailed, as many portions of the interior cannot be seen on the completed model. My most noticeable omission was the entire forward lateral transmission drive.

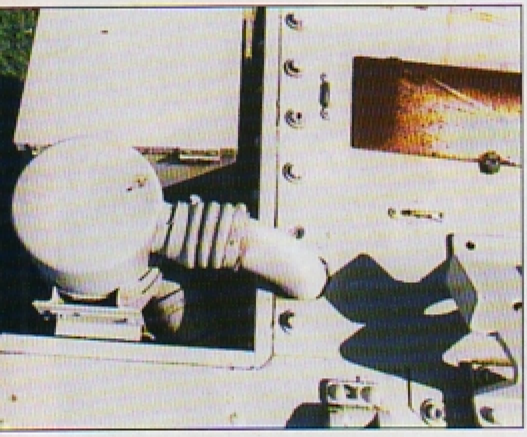
The M3A1, unlike the earlier Stuarts, used a simple turret basket. I fabricated this from sheet plastic, using a piece of On-the-Mark photo-etched grid pattern for the floor.

The Hull Superstructure

With the interior well underway, I began work on the hull superstructure. I cut open the hatch in front of the driver on the hull glacis plate. I created a new hull front plate from .30 thou plastic sheet to replace part B18, since I intended to cut the hatches from the kit part. This inevitably destroys the section in between, necessitating the new part.

The M3A1 hull construction was different from the earlier Stuart variants without some of the prominent external rivets. So I removed these from the appropriate parts including the two side plates (B1, B5) and the front hull corners (A16, A17). The kit depicts a diesel-engined M3 Stuart, distinctive due to the long pipes running to the engine air cleaners (kit parts A4, A6).


Another view of the interior before painting. This view shows the fire extinguisher behind the driver's seat. Detail around the driver's seat is more elaborate since this is one of the few portions of the interior readily visible once the model is assembled.

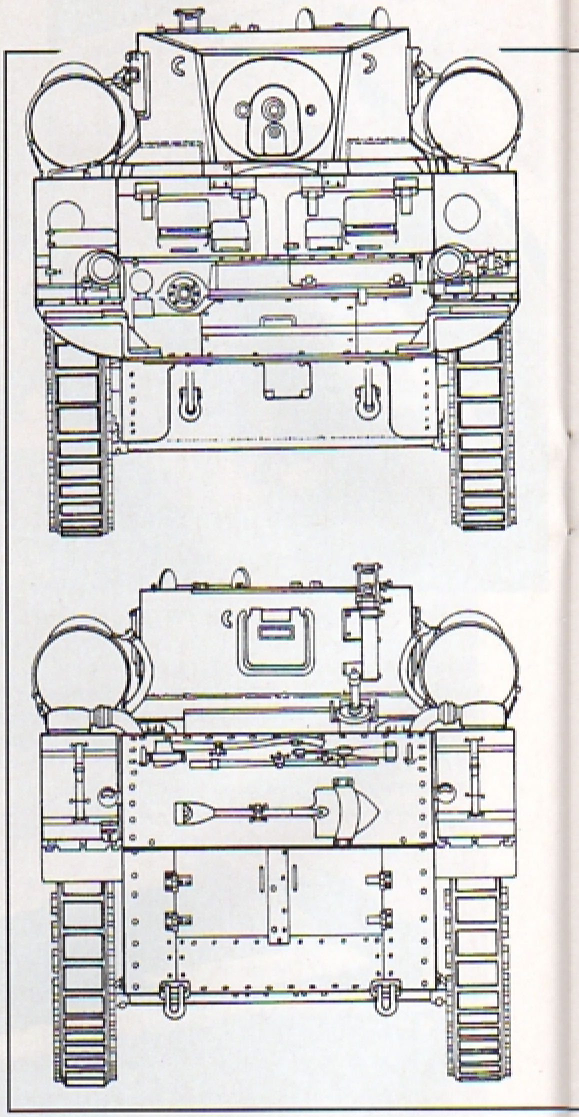

ABOVE: An overhead view of the air cleaner on an M3 Stuart. Notice that on the gasoline powered tanks, the air cleaner hose entered the hull near the side.

The gasoline powered Stuarts were used by the US Army in North Africa. The diesel tubing enters the hull through oval cut-outs in the engine deck air intake which are not present on the gasoline powered Stuarts. So this means reconstructing the air intake assembly. I planned to do this anyway as the kit comes with the intake screening moulded on, and I wanted to use actual screening over the opening. The easiest way to deal with this problem is to completely remove the entire wedge-shaped air intake assembly. I did this using a Dremel power tool and various shaping burrs.

The upper hull required very little interior detail, except for some work near the driver's side vision slit, and a small instrument panel near the driver's knees.

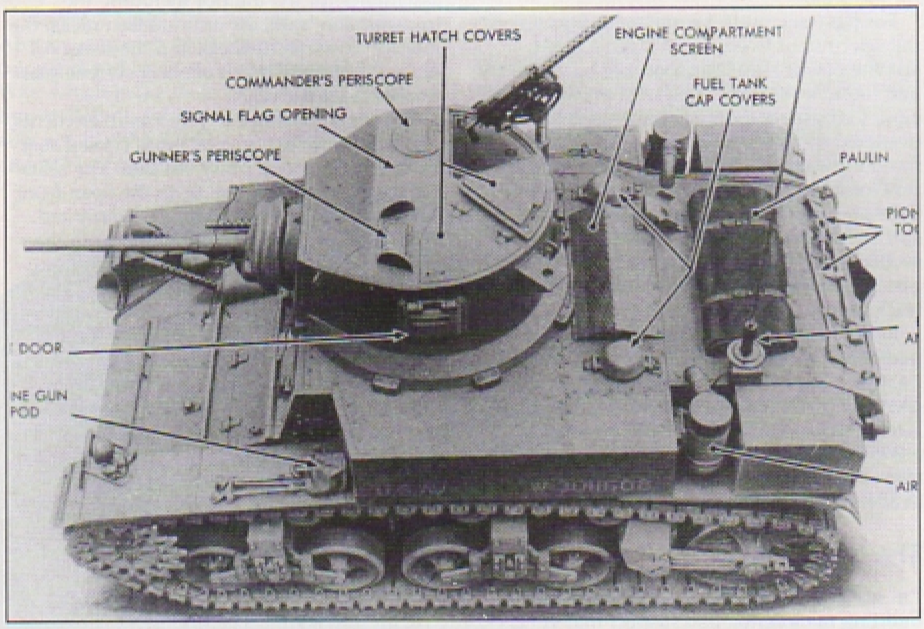
The last major piece of work on the hull superstructure is the rounded rear deck. Commanders provides a piece for this, but I decided it would be easier to convert the rear deck overhang to the rounded shape myself. After gluing on part A25 with super glue, I reinforced the area behind it with super glue, dried it quickly using an accelerator, and then reinforced it further with five-minute epoxy. I use Zap-a-Gap gap-filling super glue as I find that when dry, it's consistency is very close to the plastic itself making it ideal for filling small gaps. The epoxy backing is simply for strength.

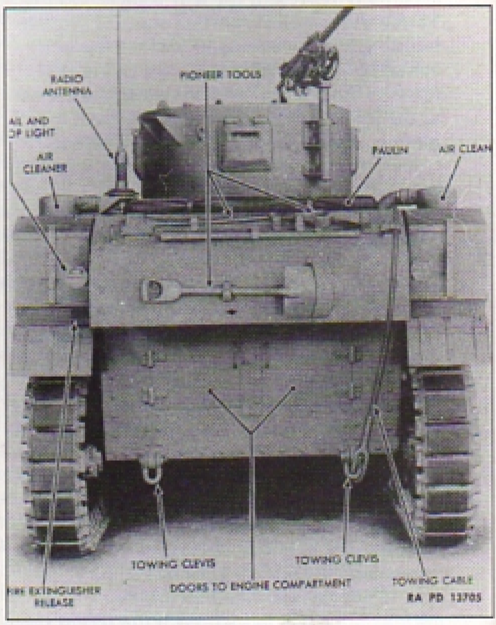
I then reshaped the rear deck with files and sanding sticks. Super glues have very nasty fumes, as do the accelerators. They should only be used in well ventilated areas. I purchased a small fan to mount on my work desk to disperse fumes as I use super-glue quite often on projects.



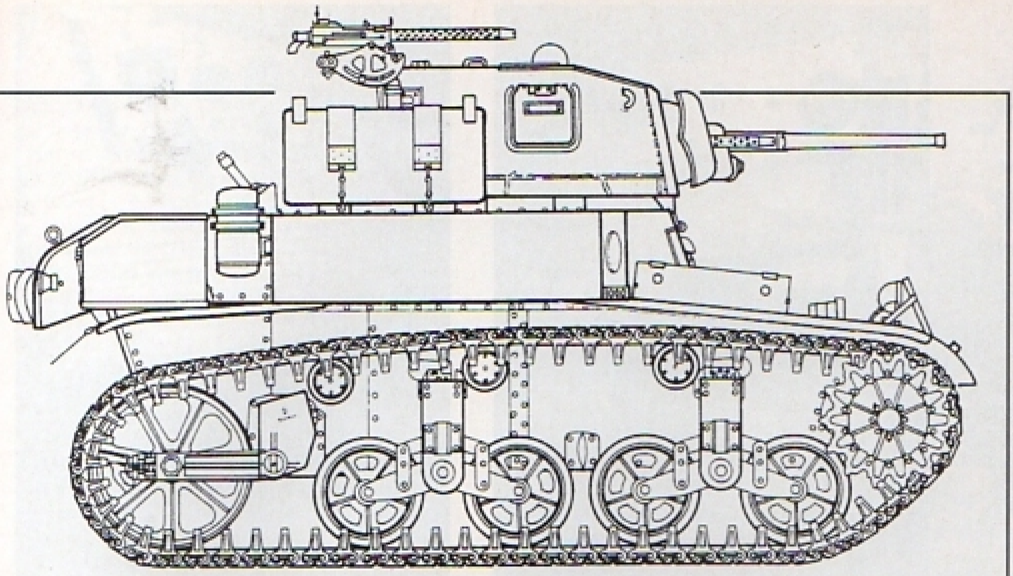
The turret interior

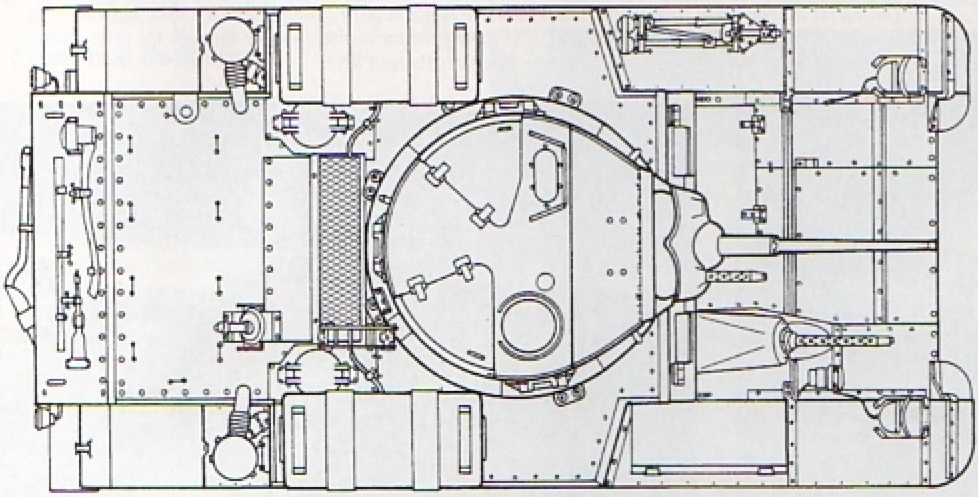
My least favourite part of this entire project was hollowing out the resin turret interior. This is a very messy job, with plenty of resin dust flying about. It is best done outside, but as I worked on this project in the autumn, I did most of the work in my sink where it was easier to clean up. Modellers should be warned

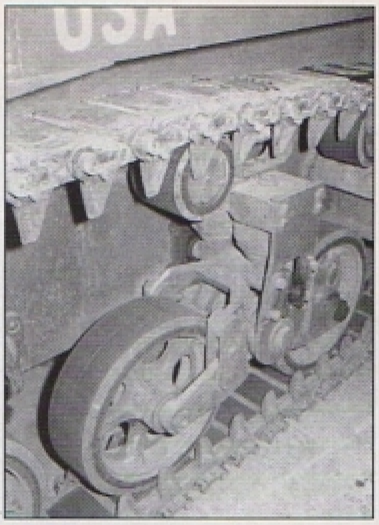




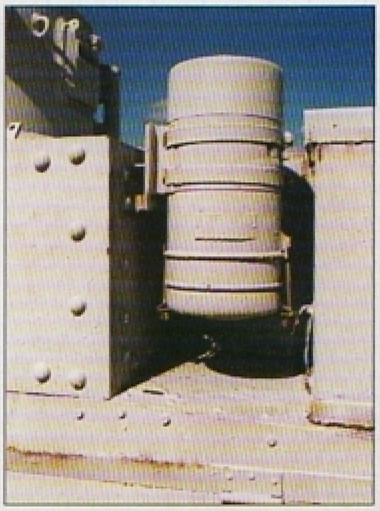
ABOVE LEFT: A view from the Stuart technical manual showing the tool stowage and other features of the standard production M3A1 light tank. ABOVE RIGHT: Another view from the technical manual showing the rear area details including the tool stowage.

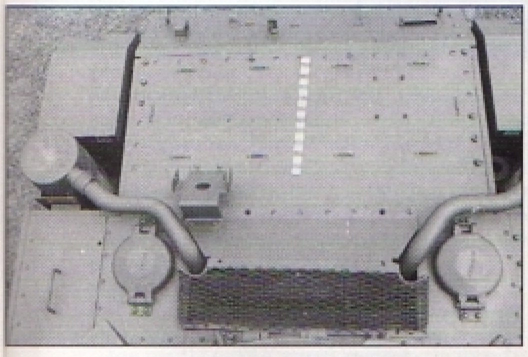




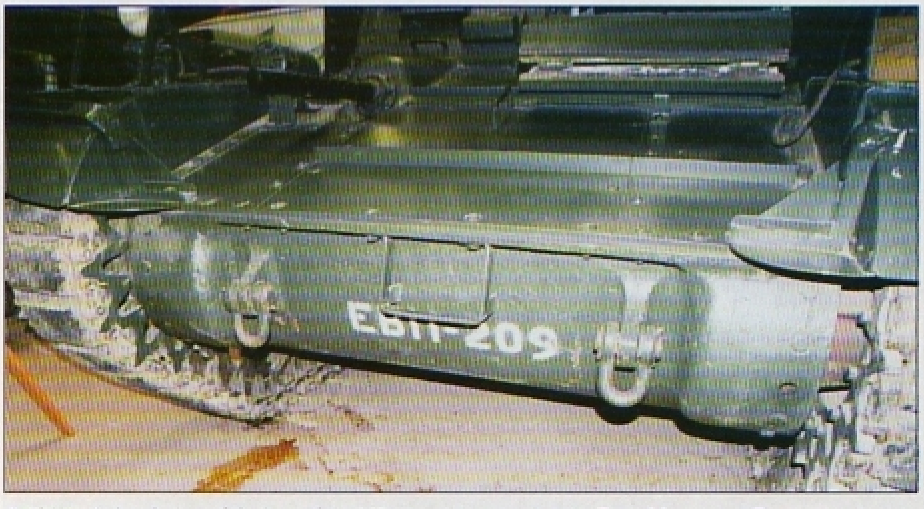


ABOVE: A detail view of the suspension bogie on the M3A1 Stuart. The kit assembly is one of its better features.
BELOW: A side detail photo of the engine air cleaner on the M3 Stuart.





ABOVE: The kit depicts the air cleaner configuration found on the diesel powered tanks, as in this view of the M3 Stuart at Aberdeen Proving Ground on which the Tamiya kit is based.



ABOVE: A detail view of the bow of the M3 Stuart preserved at the Tank Museum at Bovington showing the transmission housing shape as well as the front crew step.

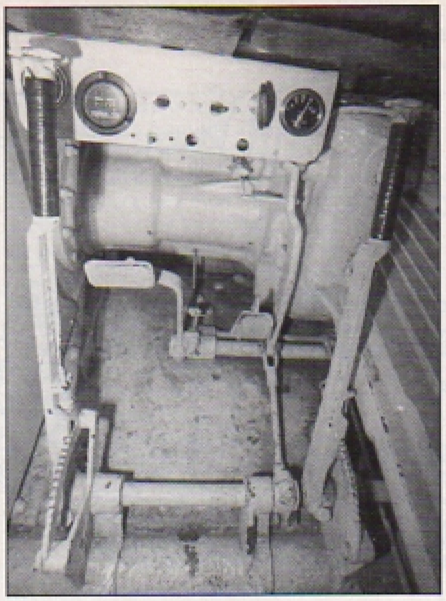
that some people are allergic to resin dust, so some special care beginning by wearing a face mask, should be exercised on projects such as this. I used a Dremel power tool with drill bits and various burrs to cut away the bulk of the interior material, followed by some sanding tools. A few times, the burrs got caught up inside, twice cutting through the surface. So some exterior repair was needed. Maybe some enterprising resin kit manufacturer will have the kindness to provide us with a nice hollow resin Stuart turret!

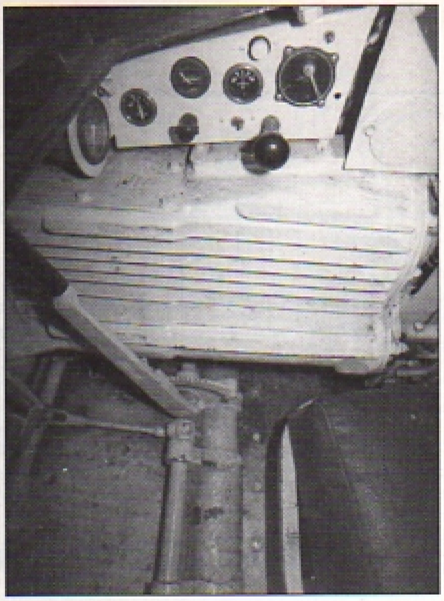
The Stuart turret interior is actually quite simple. I had already prepared a basic 37mm gun assembly from an earlier US project, and this is the largest single element inside the turret. The rest is mostly hatch detail, and interior stowage. I only detailed the left side of the turret, as the right side was going to be filled by the wounded commander being pulled from the turret. With the basic interior work complete, I painted the interior. The basic colour is white, though some sub-assemblies are different colours. I used Tamiya acrylics for the interior, and followed this with a wash of Winsor & Newton Raw Umber and black oil paint and mineral spirits. I also painted certain parts that would be difficult to reach after the hull assemblies were glued together, including the upper run of the track, and the area under the fenders. Once this was completed, I sealed up the hull by attaching the superstructure to the lower hull.

Exterior fuel tanks

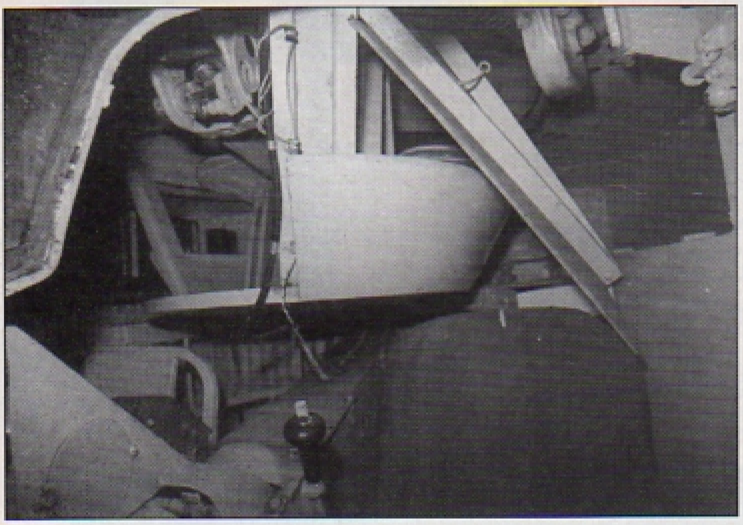
The Stuarts had a poor range, which led to the development of exterior fuel tanks in 1941. These were attached on special skids with a fast release system so that they could easily be dropped off the vehicle before entering combat. In fact, many photos of Stuarts knocked out by the Germans at Kasserine Pass show the fuel tanks still on the vehicles.

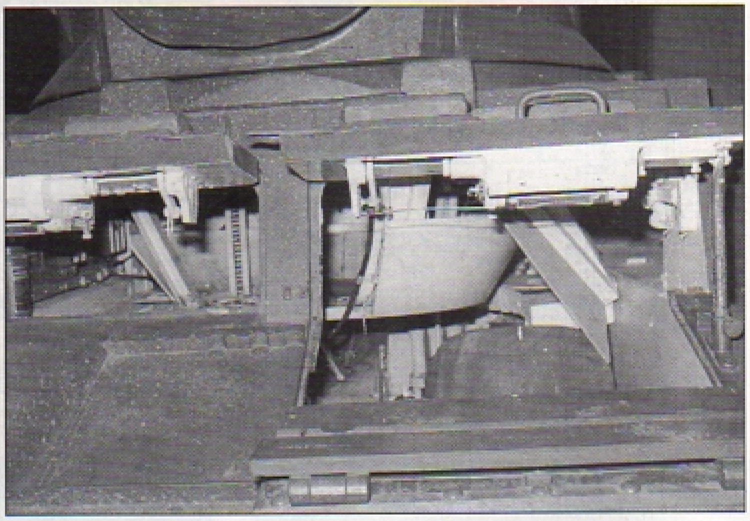
Commanders Models provides a very rudimentary set of fuel tanks with their conversion kit. These are only the tanks, and lack all the associated mounting racks, straps, and fixtures. I made the racks under the tanks from thin brass sheet. At the outer edge of the tanks are reinforcing hoops, with a pair of lifting straps above. I made these from thin lead sheet. I also used lead sheet to represents the canvas retaining straps. These canvas straps were heavily stitched for strength, and I duplicated these patterns by scribing a set of parallel lines into the soft lead before cutting the straps out. The metal reinforcing plates at the ends of the restraining straps were made from thin sheet plastic. The many small attachment rings came from various sizes of Grandt Line railroad detail sets. This was a fairly complicated detail project, and some modellers may wish to skip it. But I felt it would give the Stuart a different appearance, and be more typical of the Kasserine M3A1 light tanks.



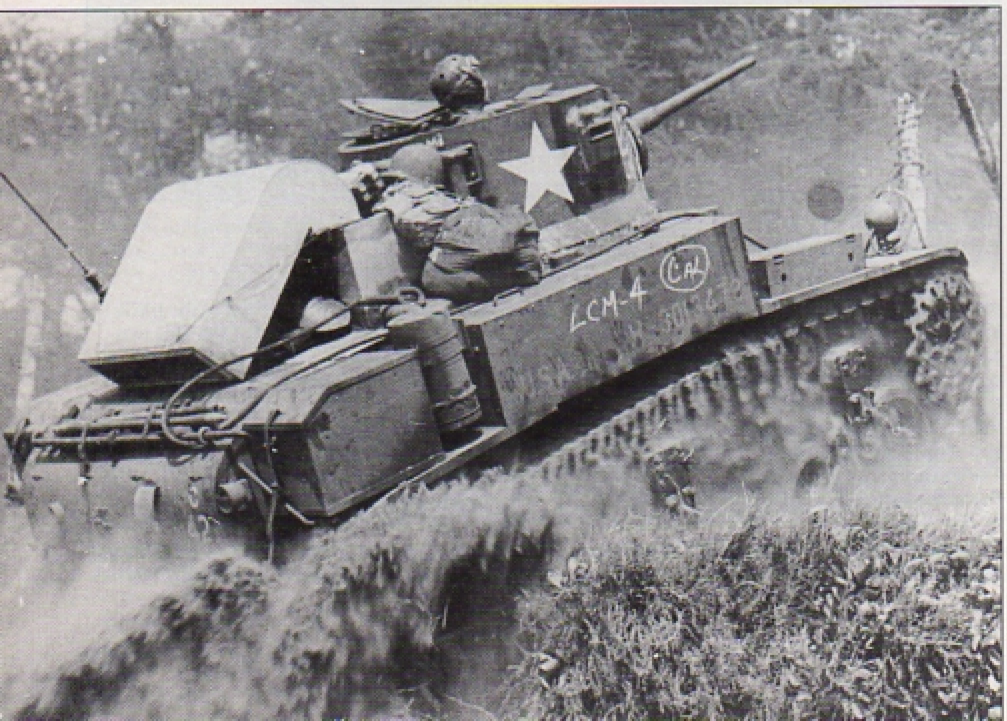


ABOVE LEFT: A view from the driver's seat looking forward. This shows the driver's controls, as well as the lateral transmission final drive. The final drive is not evident through the kit's open hatches, so it was omitted on the model. ABOVE RIGHT: The most prominent object visible through the open driver's hatch is the transmission housing and driver's instruments seen here.





ABOVE LEFT: When view through the open front hatches, the turret basket obstructs the view of many other interior details. This photo of the M3A1 light tank preserved at the Patton Museum at Ft. Knox has a large wood placard stowed inside, further obstructing the view! ABOVE RIGHT: This front view gives some idea of the turret interior as well as the detail on the open hatches. BELOW: Another modelling option for the M3A1 light tank would be wading trunks, used to seal off the engine when the tanks waded ashore from amphibious landing craft. On this vehicle, only the top air trunk is still present, though the base of the trunk is still evident over the air intake housing behind the turret. When coming ashore, the M3A1 would also be fitted with a larger rear intake covering the rear access doors and air intake. Note also that during landing operations, many portions of the tank were sealed with a thick tar-like substance to keep out the water, evident for example over the turret vision ports. This is a US Army M3A1 light tank from the 193rd Tank Battalion taking part in operations on Makin in the Gilberts in November 1943. (US National Archives).



Engine deck detail

The kit air cleaners (parts A33, A34) are not the best, and I decided to replace them. I turned out a new pair using aluminium rod on a lathe. Modellers without access to a lathe can readily make these from plastic rod as they are a simple cylindrical shape. I made the hose running from the cleaners into the engine deck from aluminium rod, and added the 'accordion' joint from thin lead wire. I used parts from the Eduard photo-etched sheet for this model project which has some very useful parts including a nice set of lamp guards. The sheet provides a new engine deck air intake screen with very delicate features. Unfortunately, it is designed for the diesel engine versions, and so is useless on this project. So I made a new engine air intake housing cover from sheet plastic and aluminium screening.

The most prominent details on the rear of the hull are the tools. I used tools from Collectors Brass. These are very well done, though expensive. I added the standard vehicle tarpaulin from epoxy putty. For these types of parts, I use the green Kneadtite putty rather than the more familiar white Milliput or A&B putty.

This green 'ribbon' style epoxy putty is much smoother and tackier, and I find that it can be rolled into flat sheets much more easily. I use a small piece of glass for the rolling surface, lubricated with some Vaseline petroleum jelly. For a roller, I used a circular wood dowel (originally a chopstick from a local Chinese restaurant!) I find that the epoxy is a better approach for tarpaulins than aluminium foil, tissue, or lead foil, as it is possible to work in small details much better, such as the patterns of wrinkles and folds created when the tarp is strapped tightly to the deck. Other details on the rear deck include the old pattern radio antenna mount from the Eduard PE set, and the new pattern radio antenna mount, which I made from sheet plastic.

Front hull detailing

There is plenty of small work to be done on the hull front. The M3A1 light tank had a windshield cover stowage box added to the right fender which I made from sheet plastic. On the left fender is a folded tripod for the Browning .30 cal machine-gun. This came from the Academy US and German stowage and tools set. The headlight guards came from the Aber photo-etched set.

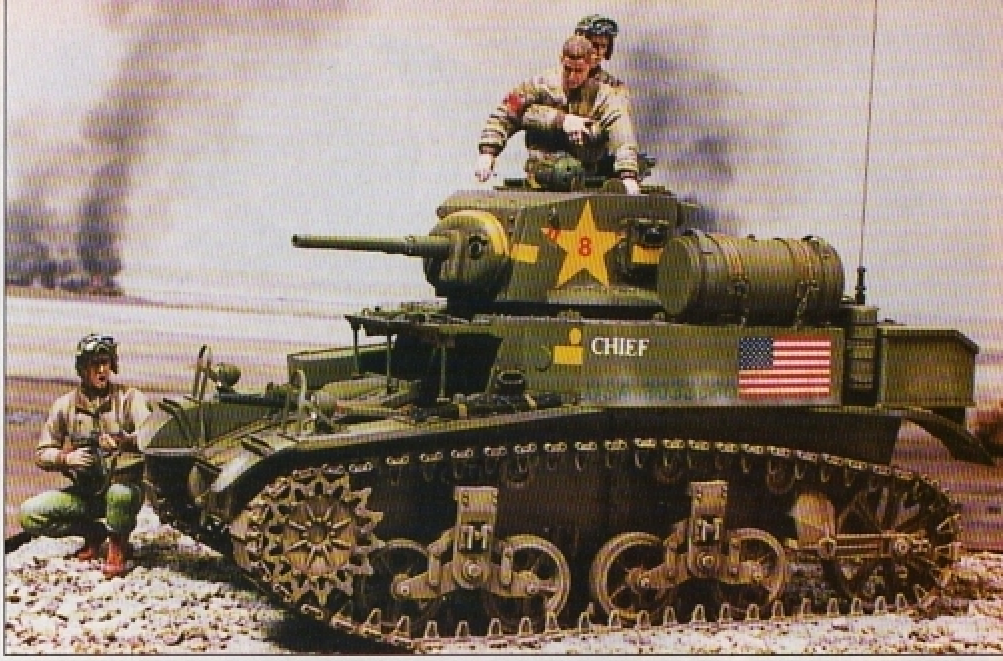
The M3A1 had reinforced front fenders, and I made these from sheet plastic. The kit's various .30 cal Browning machine-gun barrels are poor. There are several aftermarket alternatives, including a set from Collectors Brass.

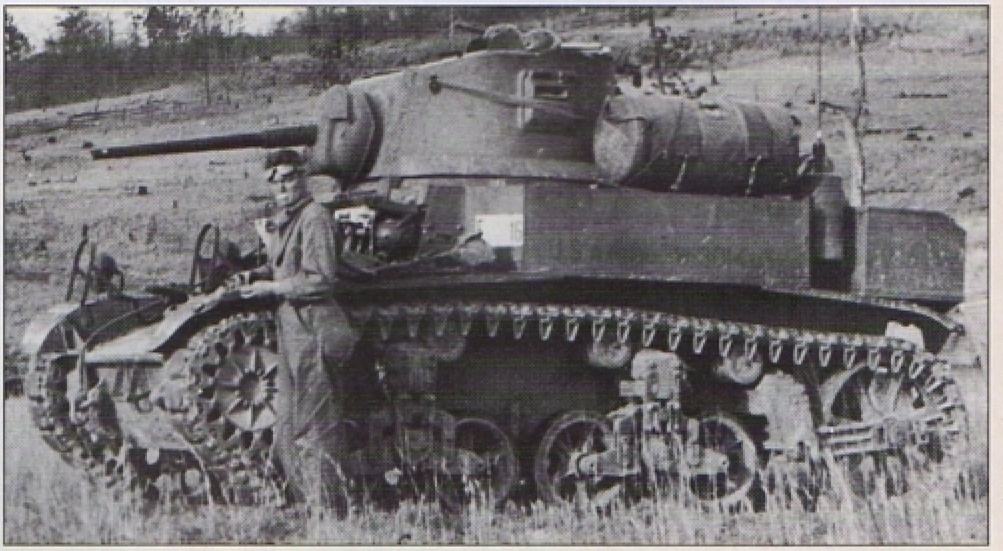
In my opinion, the best, but most difficult option, is the Aber photo-etch detail set for the Browning .30 cal air-cooled machine-gun. This basically provides photo-etched parts for the heavy mount cradle, but also includes three barrel sleeves with the air holes etched out. Needless to say, these come flat, and the trick is to make them tubular. It helps to soften the brass by annealing it by carefully heating it over an intense flame, such as a that from a gas stove. Once this is done and the piece is cooled, I placed the part on a soft, flat rubber surface (a drafting eraser) and then rolling the brass, using a hard steel rod the same diameter as the intended machine gun barrel. I used the straight section of a large paper clip which helps to make the piece curl evenly. I added a muzzle made from turning a small piece of brass rod, but another approach would be to use a small piece of plastic rod to simulate the final taper on the barrel. This is extremely delicate work, but I think it gives the best results for the Browning air-cooled barrels. I did two of these barrels, one for the hull front, and one for the co-axial machine-gun.

Other hull front details include the lifting hooks on the bow transmission housing which I made from thick lead wire and small plastic discs cut using a punch-and-die set.

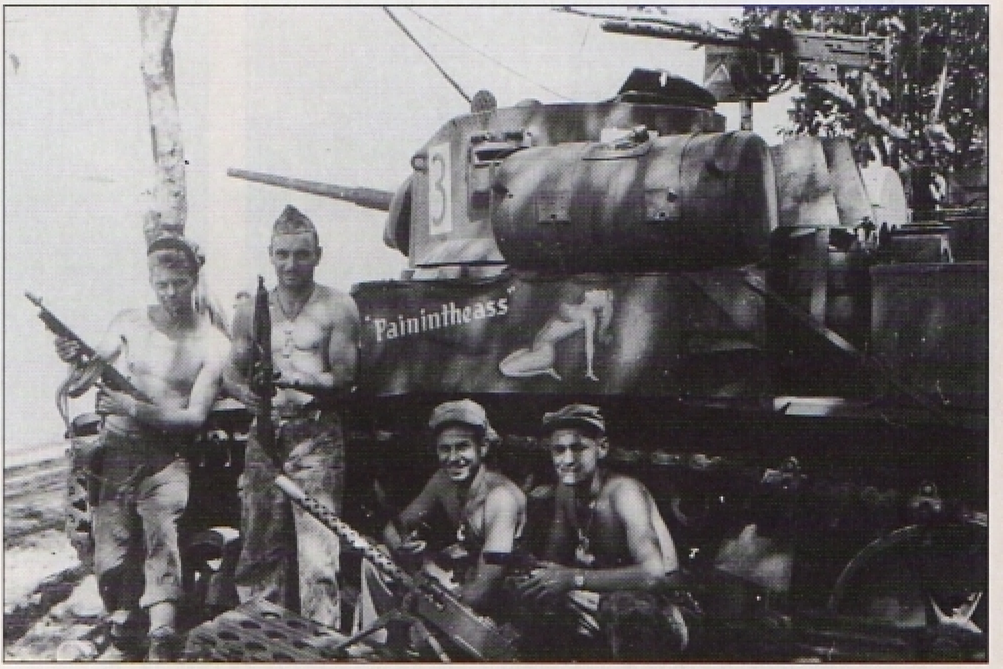
Turret detailing

The Commanders resin turret detail is not the best. I replaced the two roof periscopes, and I sharpened up the detail on the vision port/hatches using a fine dental burr and a Dremel motor tool. The 37mm gun and mantlet are kit parts. I decided to show the machine-gun mount with the heavy .30 cal. cradle, but without the machine-gun itself. Collectors Brass make a



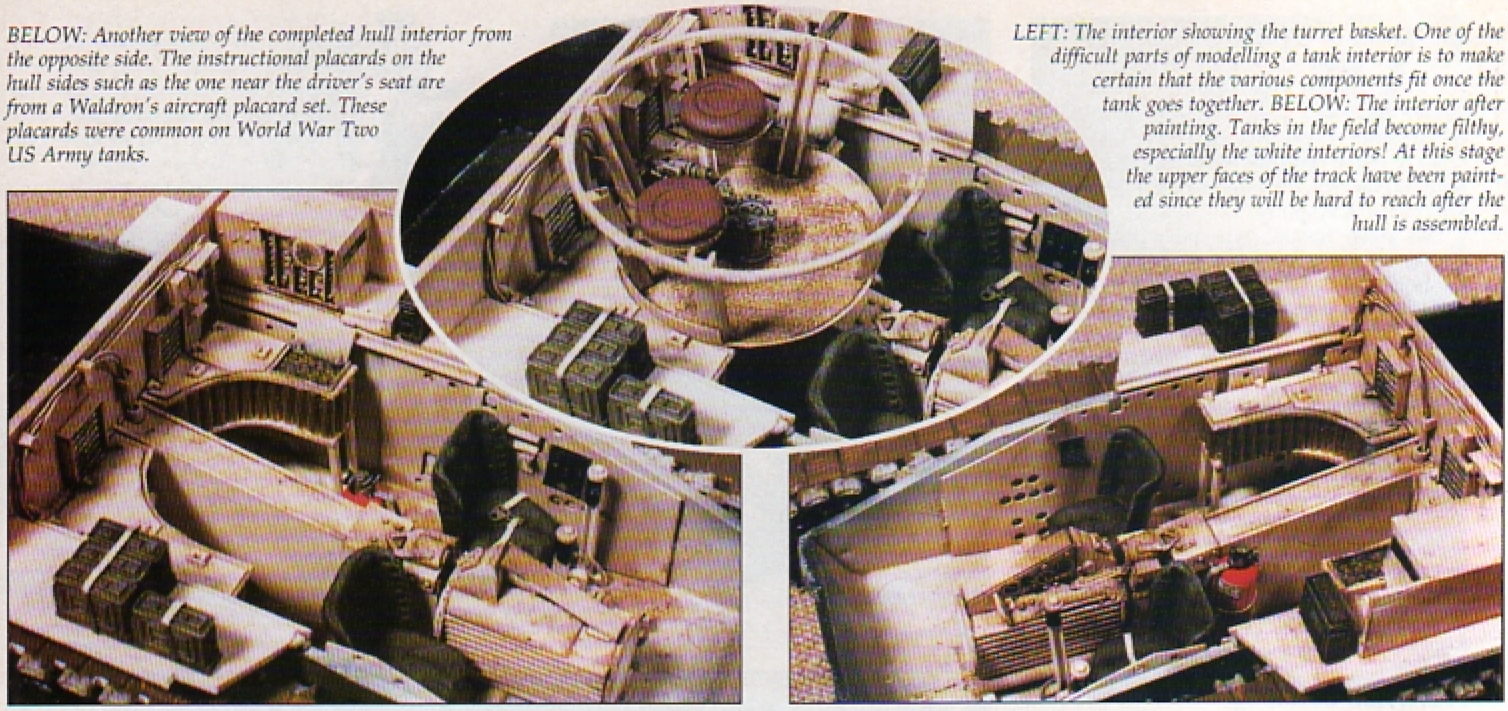


This is a good example of the version of the M3A1 light tank modelled in the article. It clearly shows the later hull configuration and the long-range fuel tanks. This photo was taken at Fort Polk, Louisiana on 9 February 1943. (US National Archives).



A gaudy set of markings on an M3A1 light tank of the US Marines 3rd Tank Battalion on Bouganville in the Solomons in November 1943. The markings consist of the vehicle tactical number 3 in red on a white square trimmed in red, plus the vehicle name and a pin-up painted on the side. This vehicle has a .50 cal heavy machine gun mounted on the turret instead of the usual .30 cal machine gun. (US Marine Corps).

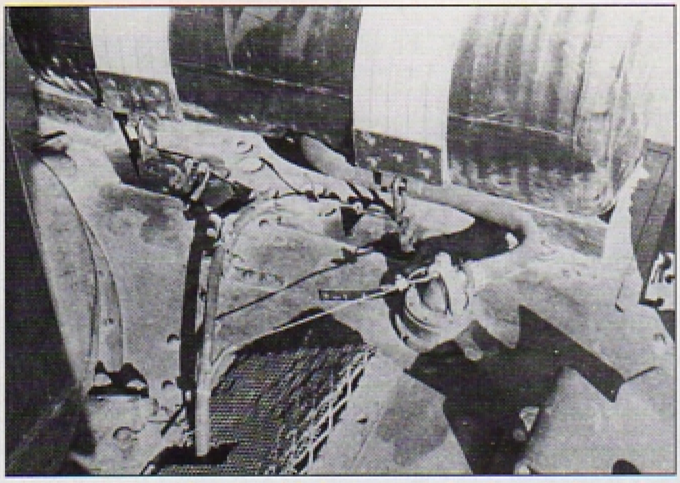
BELOW: *Another view of the completed hull interior from the opposite side. The instructional placards on the hull sides such as the one near the driver's seat are from a Waldron's aircraft placard set. These placards were common on World War Two US Army tanks.*

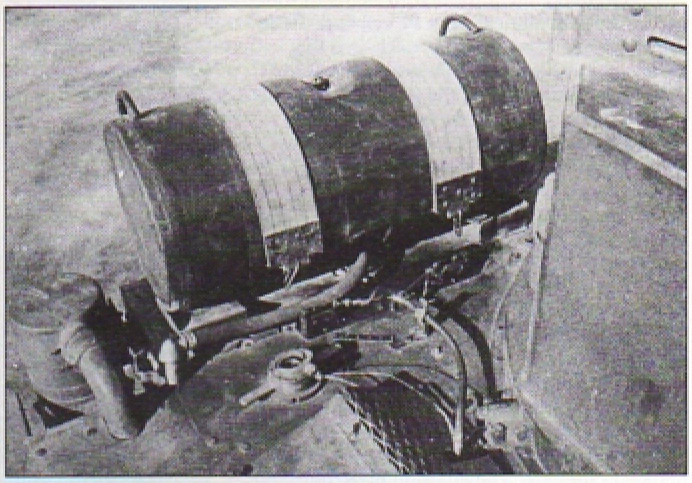


LEFT: *The interior showing the turret basket. One of the difficult parts of modelling a tank interior is to make certain that the various components fit once the tank goes together.* BELOW: *The interior after painting. Tanks in the field become filthy, especially the white interiors! At this stage the upper faces of the track have been painted since they will be hard to reach after the hull is assembled.*

Basic work on the hull is completed, including the new superstructure front. The red lines around the Commanders' Models turret are a fine weld bead made from putty.

The turret interior and turret basket. The Commanders Model turret is solid and had to be hollowed out. This photo was actually taken before the hull interior was completed.



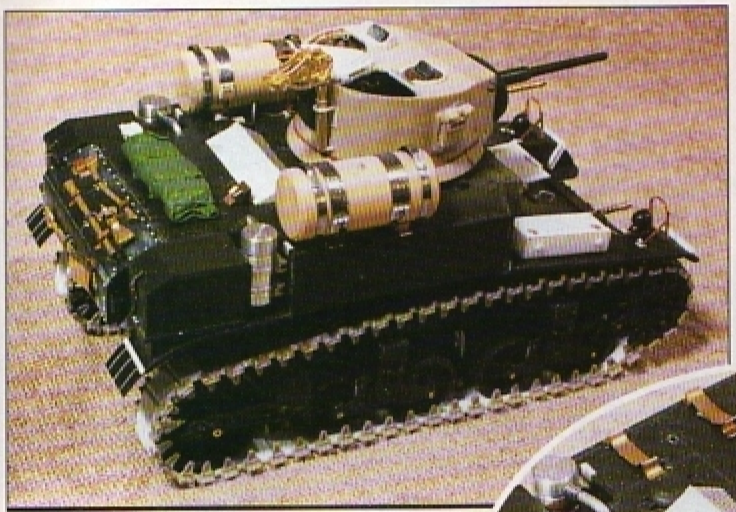


ABOVE LEFT: Another view of the long-range fuel tanks on the Stuart. In this view, the fuel line has been fitted to the fuel cap to transfer the gasoline.
ABOVE RIGHT: This is a detail view of the spare fuel drums on the M3 Stuart as well as the associated attachment. This is during the prototype trials in 1941, so details of the fuel drum itself differ from the production drum, notably in the shape of the handles on the drums used for lifting it. On the production drums, these were straps, not rods. Two hoses come out of the tank, one of which goes into the tank through the air intake, the other of which is used to pump the fuel. (US National Archives).

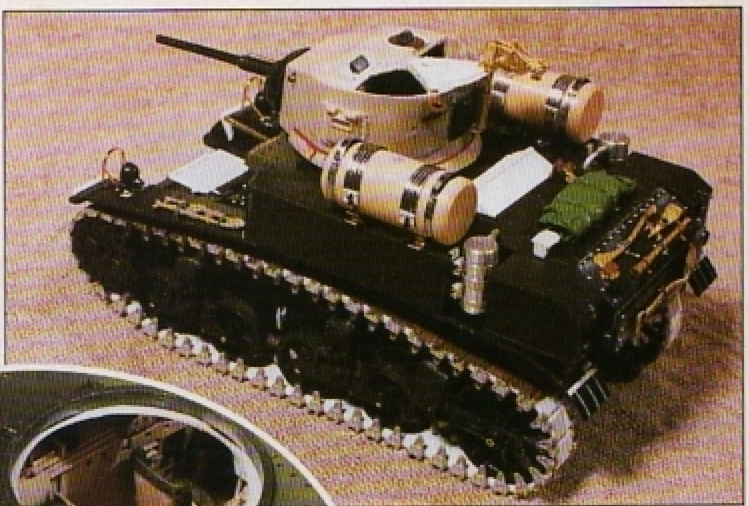
beautiful, but expensive, heavy cradle, and one can also be made from the Aber and Eduard photo-etch detail sets.

The three small lifting rings were made from lead wire. The Stuart turret had weld marks where the turret sides meet the flared ring at the base of the turret. To simulate fine weld lines, I mask the line with drafting tape the same way as if I was masking to paint a thin line. Instead of paint, however, I mix up a thin solution of modeller's putty with liquid plastic cement; in this case, Dr. Microtool and Testor's, but most similar brands will do. This results in a paste slightly thicker than paint which I then paint into the gap in the tape. While the putty is still slightly wet, I lift the tape, leaving a thin, accurate weld bead. This takes some practice, but provides a subtle weld line.

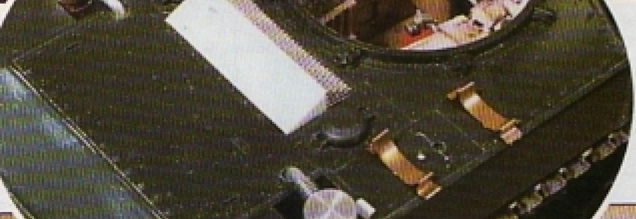
I have found that many modellers prefer a grossly exaggerated weld bead. I suppose that they do this on the theory that if they are going to go to all the trouble of adding it to their model,



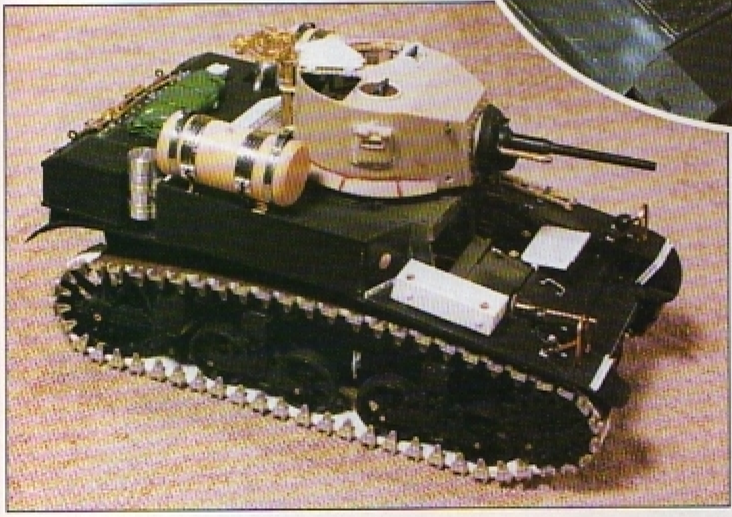
ABOVE: The completed model from the right side. The white box on the fender is the windshield stowage box, a standard item on the M3A1 Stuart. Note also the reinforcements on the front fenders, the photo-etched .30 cal machine gun barrels, and the Collectors Brass heavy machine gun cradle. BELOW: A view from the right rear side. This view shows the tool stowage at the rear.

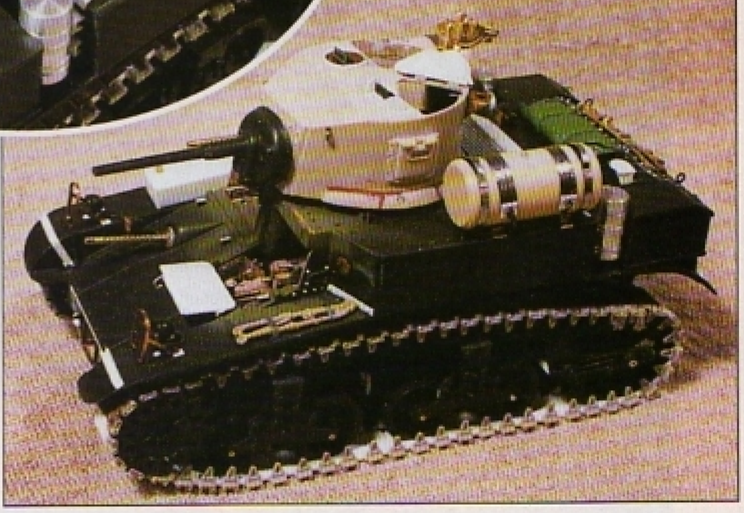


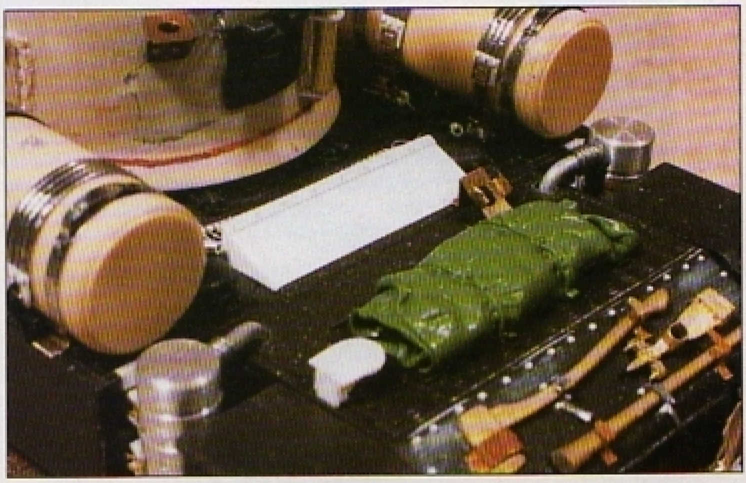
ABOVE: A view of the left side from the rear. The tool stowage is evident as well as detail work on the engine deck. BELOW: The completed model before painting, from the left side. Some of the details evident on this side are the stowed .30 cal. machinegun tripod, and the fuel tank assembly.



INSET: Detailing of the hull begins. In this view, the turned aluminium air cleaners and the air intake housing have been added. The brass racks for the fuel tanks are also evident. The hull rear has been rounded to conform to the later M3A1 configuration.







RIGHT: A close-up of the detail on the engine deck. This shows the lead sheet strapping on the fuel tanks, the epoxy tarpaulin, the tool stowage, and rivet detail.

it ought to stick out! But some observation of real weld beads on tanks show them to be far less pronounced than on many kits.

Tank crew figures

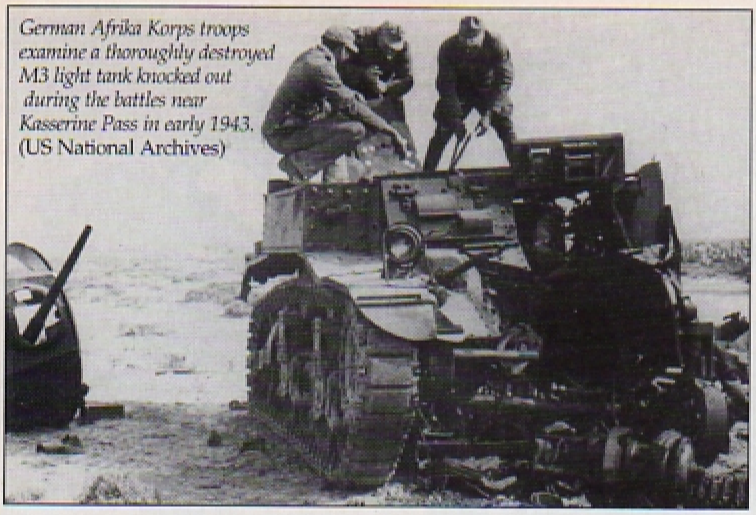
I wanted to show the crew of the M3A1 light tank evacuating a damaged tank. There are no available figures in these poses, so conversions were in order. The most difficult conversion was the turret crew.

One of my main problems was simply figuring out how it is best to lift an unconscious crewman out of the turret; with hands under the arm-pits, or by wrapping arms completely around the disabled crewman? To settle this issue, some friends in the office volunteered to do an experiment, which I photographed. We concluded that the best way was arms wrapped around the crewman. The photos helped me establish various angles as well as the wrinkling of the clothing.

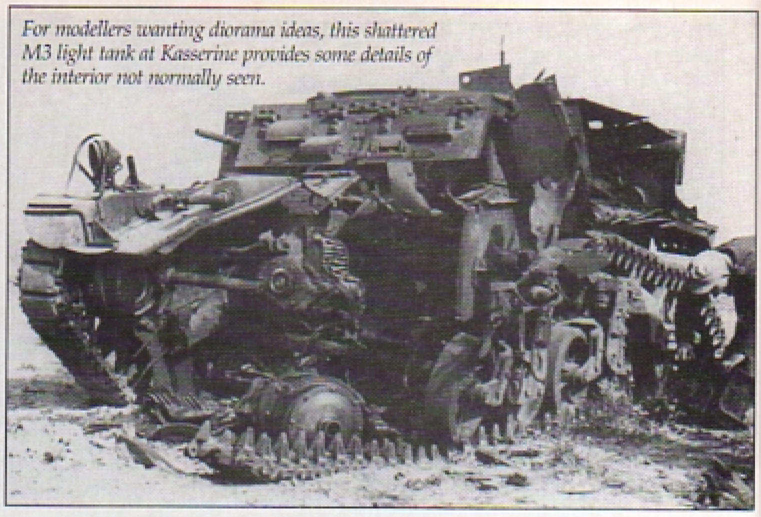
The basic figures for the conversion came from the excellent DML US tank crew figure set. This set provided the torsos for most of the figures, as well as the US tankers' helmets. The legs for the rescuer (the gunner) on the turret was from the spares box, and are from another DML set. The legs for the wounded commander are from the DML US tankers' set, but they had to be modified so that they would fit through the tiny Stuart hatch. I prepared the two turret crew figures as a set once I assembled the basic torsos and legs.

The arms of the rescuer/gunner figure were made from pieces of aluminium rod, fleshed out and clothed with epoxy putty. The wounded commander was done in the same fashion except that the entire open jacket was done from epoxy putty. The heads of all the figures were from the superb Hornet resin head sets. I would strongly recommend these head sets for anyone doing World War Two figures as they can help turn a simple, inexpensive plastic figure into a rival of the best resin figures.

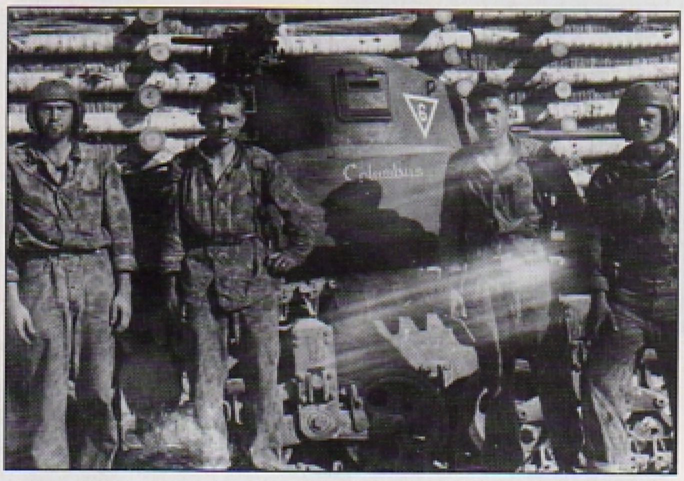
The exposed hand of the rescuer figure is from the excellent set of Historex resin hands, while the disabled crewman's hands are from the DML sets. There is a third crew figure on the ground covering the evacuating pair with a Thompson submachine-gun. This was the simplest of the conversions and consists of the upper torso of a figure from the DML US tankers' set, mated with a modified set of legs and arms from the DML US WWII airborne set.

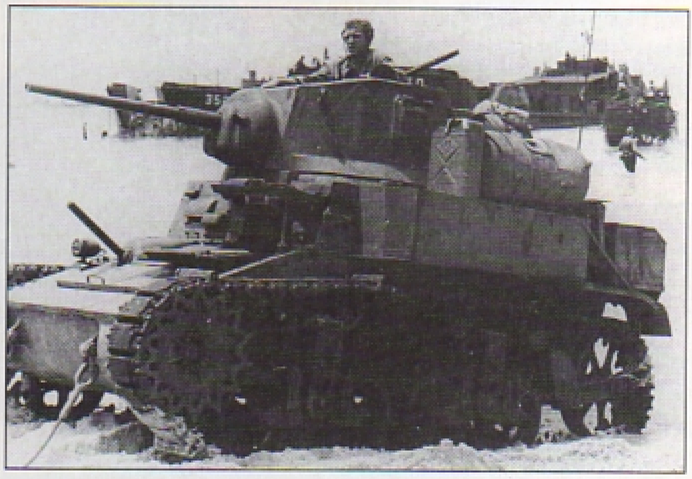


German Afrika Korps troops examine a thoroughly destroyed M3 light tank knocked out during the battles near Kasserine Pass in early 1943. (US National Archives)



For modellers wanting diorama ideas, this shattered M3 light tank at Kasserine provides some details of the interior not normally seen.





ABOVE LEFT: For modellers looking for other markings options for the M3A1, here is Columbus, from C Company, US Marine 2nd Tank Company, photographed on Tarawa a few days after the vicious fighting there in November 1943. The markings consist of the vehicle name and the number 6 within an inverted triangle. ABOVE RIGHT: Another Marine M3A1 light tank of the 3rd Tank Battalion comes ashore at Emirau island in the Bismarck Archipelago in early 1944. This carries the long range fuel tanks, as well as a spare jerrycan. The vehicle markings is the number one within in diamond, painted in yellow over the usual olive drab finish. The jerrycan carries the regimental shipment marking, the number 132 within an oblong diamond. (US Marine Corps).

As a final note on the figures, the rank insignia is from the new Hudson & Allen decal sheet. This is intended to represent rank and unit insignia for US airborne troops, but the rank insignia is common to all US Army troops.

Painting the tank

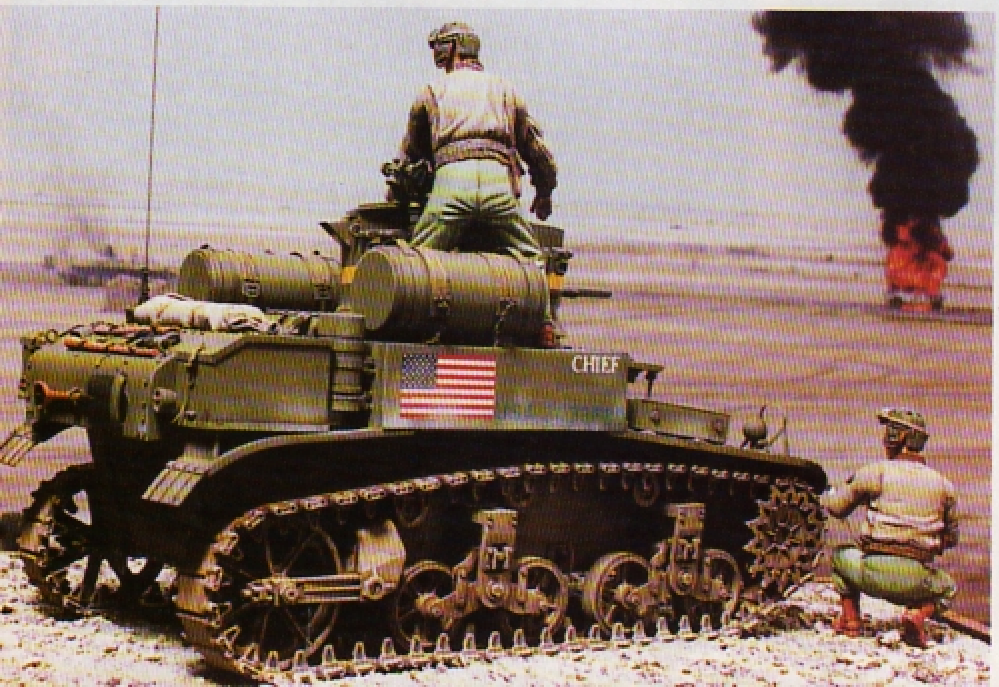
The Operation Torch tanks were painted with the yellow Armored Force's 'stars and bars'. For those looking for references on US tanks in North Africa, the new book from France *Guerre en Tunisie: Kasserine,* number 25 in the Armes-Militaria series, has an excellent selection of photos of US Stuarts from this period. The Osprey Vanguard No. 39 on US tank markings that I wrote some years ago explains the complicated geometric shape markings of the 1st Armored Division.

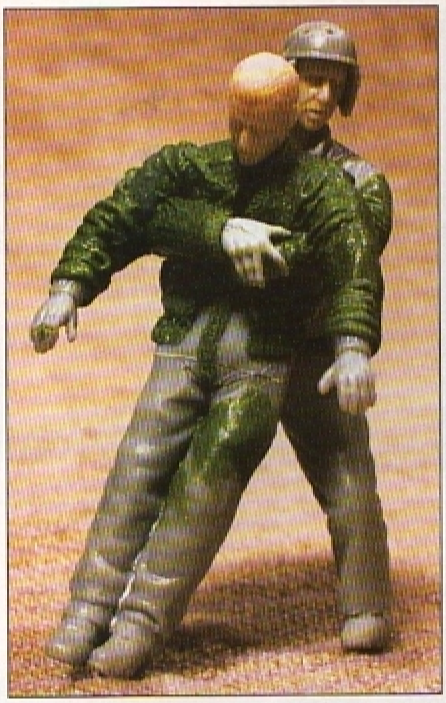
There are no decal sets covering the Operation Torch markings or the geometric unit markings of the 1st Armored Division. So I decided to paint on the insignia rather than cut insignia from yellow decal sheet. For bright colour markings on a dark background, I find that 'reverse masking' works best. Basically, the process is to paint the appropriate areas of the tank with the marking colour. I started by painting the areas in white, including the area where the flag was to be placed, as well as the areas of the yellow markings. The white base coat keeps bright colours such as yellow or red bright, and ensures a more even colour when painting over light resin and dark plastic parts. I then painted the yellow areas.

Once dry, I cut the star insignia from masking tape using a Stencilit brass stencil. I then cut the bars and other symbols from masking tape, and applied them. I had an old set of US flag decals from the old ATP set intended for airline models. I bought these over 20 years ago, and I don't know if they are still available. They consisted of three layers: the white rectangular background, a set of red stripes, and a blue rectangle with flags. I masked off the white rectangle for the flag to save having to use this portion of the decal as the decals were starting to crumble. Another alternate source of US flag decals may be 1:48 scale aircraft decals for USAAF Operation Torch fighters which also carried these flag markings.

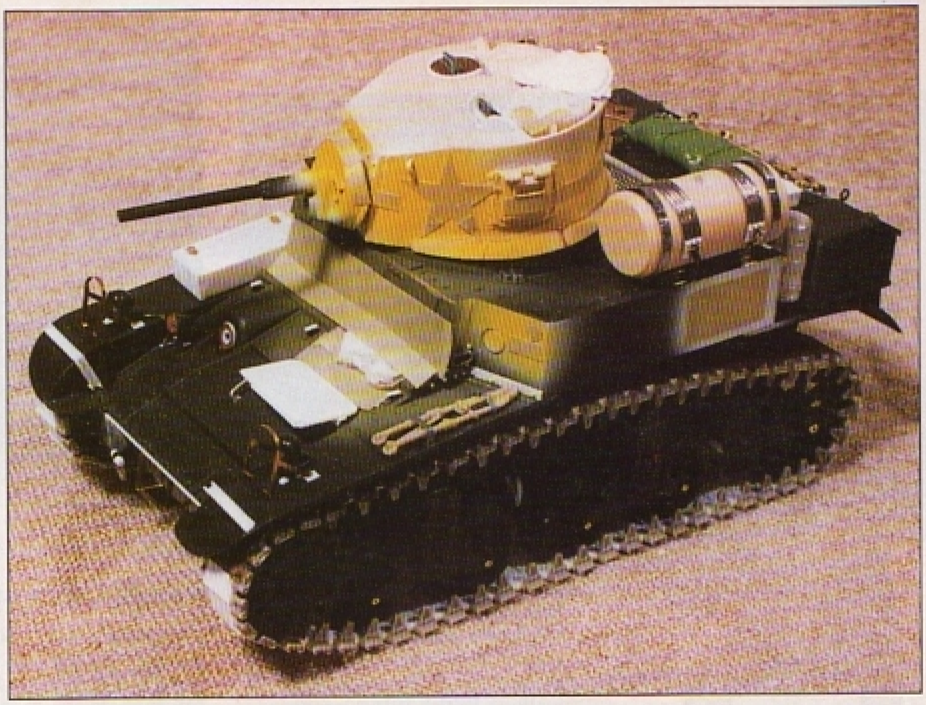
With the markings finished, I began by painting the base Olive Drab colour. To represent wartime Olive Drab, I usually use Tamiya Olive Drab, lightened using their XF-60 Dark Yellow. Similar combinations of other brands Olive Drab and Panzer Dark Yellow should also work.

Most pre-mixed Olive Drab paints are far too dark for proper scale appearance if used straight out of the bottle, and they tend to get even darker once a wash is applied over

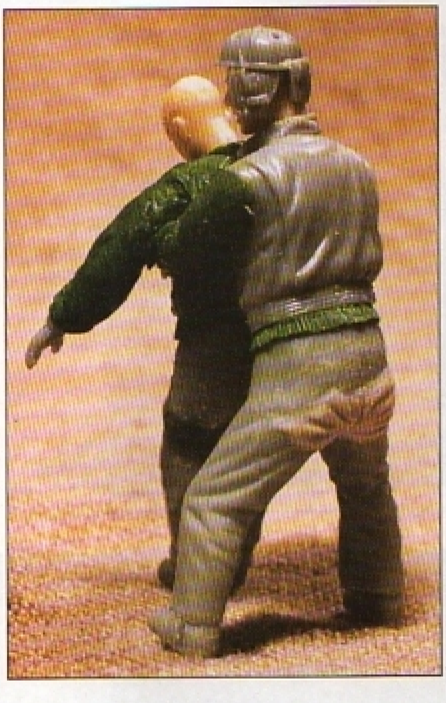




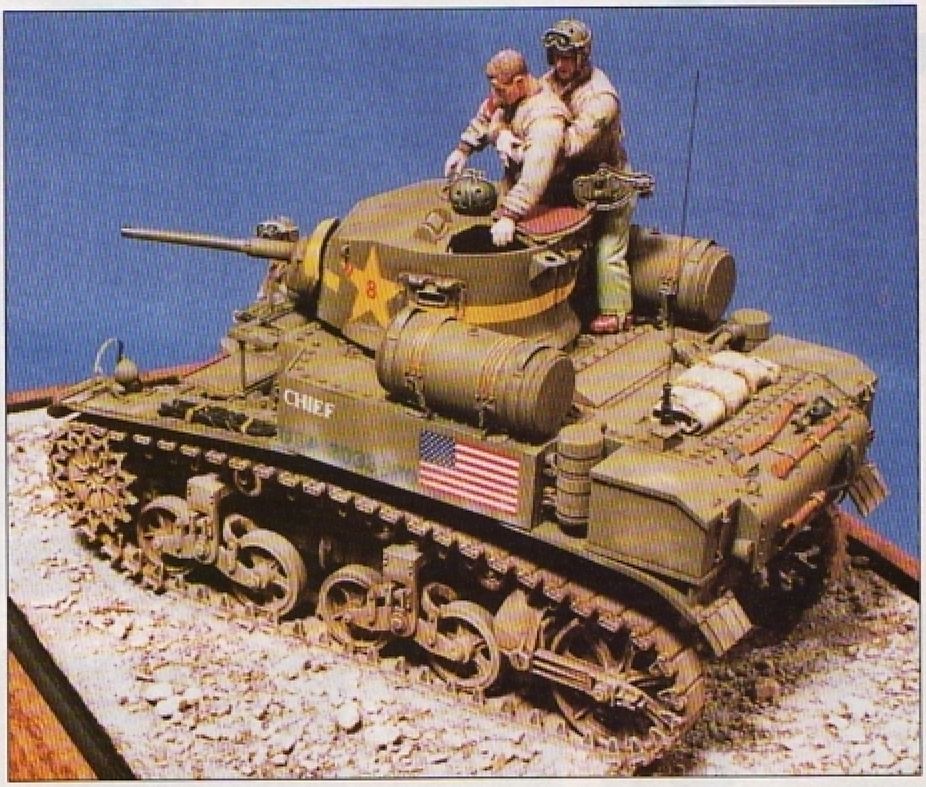
A close-up of the conversion depicting a wounded commander being extricated from the turret by the gunner. The commander's legs are from DML sets, but have been rearranged to fit into the small turret opening. The arms and jacket are from epoxy putty. The heads of both figures are from the Hornet sets.



To represent the markings, the appropriate areas were painted in white and yellow, and then masked as seen here. Once the basic colour has been applied over this, the masking will be removed. The model has also been taped up for the final painting, with the openings into the hull interior covered.



The rescuing gunner is made primarily from DML parts. The arms were made from aluminium rod covered with epoxy resin. The seat of his pant's have been remodelled with epoxy resin to provide wrinkling.



them. Once the base colour was on the upper surfaces of the tank, I painted the suspension with a light sand colour, Tamiya XF-55 Deck Tan. Once dry, I applied a very light wash of Winsor & Newton Raw Umber oil paint and mineral spirits to the upper surfaces, highlighting some of the prominent details with a slightly more intense wash.

I used a more intense wash of the same colour on the suspension, where I wanted to create a more heavily weathered effect. Once the wash was dry, I dry-brushed the upper surfaces using a mixture of Winsor & Newton Titanium White oil paint and Humbrol Olive Drab. The oil paint mix makes the dry-brushing easier to blend. I used a similar process on the suspension, but with a Humbrol Khaki colour and the white oil paint. Dry-brushing should be subtle.

The final markings including the vehicle name and the turret star numbers were from dry transfers. The blue drab serial number is from a wet transfer sheet of US armoured markings from The Master's Hobby Supply (PO Box 81484, San Diego, CA 92138, USA) which is the only source I know of for the period blue drab serial stencilling.

This project was fairly time consuming, mainly due to the effort on the interior details and the figure conversions. I probably spent about 100 hours on the project. The Tamiya kit can be made into a very attractive model, but we really need a good quality injection moulded Stuart up to contemporary standards, or at least some new resin conversion sets. I hope some manufacturers out there are listening!

Availability

Commanders Models, 551 Wegman Road, Rochester, New York 14624 USA.
Verlinden Productions, Grandt Line parts, Aber etched brass parts from Historex Agents, Wellington House, 157 Snargate Street, Dover, Kent CT17 9BZ
Collectors Brass, Accurate Armour Ltd., Dept MM, Units 15-16 Kingston Industrial Estate, Port Glasgow, Inverclyde, Scotland PA14 5DG.
Kneadtite epoxy putty, Optum Hobby Aids, PO Box 262, Haywards Heath, West Sussex RH16 3FR. Tel: 01444 416795. ■

SOLDIER BOX

For collectors of toy soldiers with Stuart Asquith

A Roman legionary with sword, part of a new boxed set from Albion's Armies.

Royal Military Police Set

D.B. Figurines at Bartons, 166-170 Cromwell Road, Whitstable, Kent CT5 1NB (tel: 01227 273917) have added a Royal Military Police Set 1945 to their range of boxed sets. There are five figures in the set - a Warrant Officer directing traffic, three lance corporals stood at ease and a fifth figure with a Thompson submachine-gun - which retails at £39.90, plus 5% UK postage and packing, 10% overseas.

ACW Union Infantry

Tradition of London Limited, (33 Curzon Street, Mayfair, London W1Y 7AE. Tel: 0171-493 7452) have added a painted and boxed set featuring Union infantry of the American Civil War. The set (Ref No 909, £68) features an officer, drummer, sergeant and five privates, all marching along at the slope in fine style. The figures are also available as unpainted kits.

New From Soldier Pac

Soldier Pac (2 Holland Drive, Muxton, Telford, Shropshire TF2 8RA, tel: 01952 676822) have released a number of new castings of former Britain's figures to their range. These include a walking British WWII infantryman, a King's Royal Rifle Corps rifleman marching at the trail, a Station Master and a selection of Boy Scouts and Scout Master, all at £1.50 each. Postage and packing is 10% for UK, 15% EC and 20% elsewhere.

A small selection of the latest additions to the Soldier Pac range of castings, painted here by Stuart Asquith.

Roman Legionaries

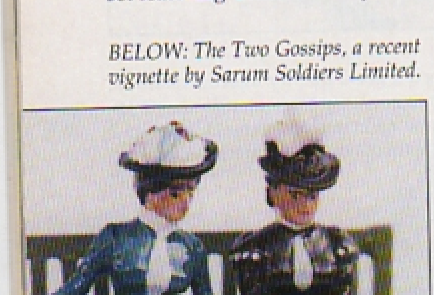
Albion's Armies (7 Morland House, Susan Wood, Chislehurst, Kent BR7 5NG. Tel: 0181-468 7089 or 01322 430528) now have ancient Roman infantry in their range. The painted boxed set consists of a Centurion and four legionaries and retails at £40, but single painted figures are also available at £9.50 each, both prices being inclusive of postage and packing. Note that the figures are only available as painted items, not as castings.

A Chinese Wedding

King & Country have produced an eye catching Chinese Wedding procession group. Set in the period of the last Manchu ruler, the Emperor Pu Yi, the

ABOVE: The Royal Military Police Set 1945 from D B Figurines.
RIGHT: A WWI Stoke's trench mortar and four man crew moving up to the front. The Number 1 (leading) carries the barrel, No 2 the base plate, No 3 the folded bipod and No 4 the ammunition. A new set - which included the section of diorama base - from Trophy Miniatures Wales Ltd (Unit 4, Vale Enterprise Centre, Hayes Road, Sully, Penarth, South Glamorgan CF64 5SY. Tel: 01446 721011).

BELOW: The Two Gossips, a recent vignette by Sarum Soldiers Limited.



ABOVE: A new set of Union infantry of the American Civil War by Tradition of London Limited. BELOW: Spanish cavalry figures in the traditional toy soldier style by El Infante of Madrid.

The sedan chair, bride occupant and eight bearers, the centre piece of the Chinese Wedding procession group from King & Country.

procession reflects the fact that the affluent Chinese traditionally took the opportunity of a wedding to display the wealth, rank and privilege of the family concerned. The complete set comprises 14 musicians and 10 bannermen, eight sedan chair bearers, the sedan chair and its occupant - the bride herself. The complete Chinese Wedding set retails at £599.95, although the various elements such as the sedan chair group (£179.95) and the musicians and bannermen (£15.95 - £28.95) are available as individual items. These and all the other King & Country ranges are available from King & Country UK, 20 Rockingham Way, Portchester, Fareham, Hampshire PO16 8QS. Tel: 01329 233141.

Galloglass Miniatures

Galloglass Miniatures (32 Garrick Close, Ealing, London W5 1AS Tel: 0181-998 7813) are a new company producing traditional 54mm toy soldiers. Their first release features a set of marching figures from the Irish Free State Army 1923. Individual painted figures are £6.50, flag bearers £8 and a boxed set of six pieces is £39, presumably plus postage and packing.

El Infante

El Infante are a Spanish company who have started producing limited edition (200 issue) figures reflecting the history of Spanish cavalry, in the toy soldier style, under the Toyson label. There are six figures so far available and it is intended that there will be 14 in the series. Judging by the sample received, these really are splendid figures with a high degree of attention being paid to the painting which is impeccably finished. The only minor problem is that the figures are 70mm in size and thus will not blend in too well with collections of 54mm figures. The price of each individually boxed figure is 5,500 pesetas, plus 15% surface postage and packing to Europe, 30% airmail to the USA. A list which includes coloured illustrations, is available on receipt of two IRCs to El Infante, Calle Alcantara No 35, 28006 Madrid.

The Two Gossips

Sarum Soldiers Limited (2a Upper Tooting Park, London SW17 75W) have released a charming vignette entitled 'The Two Gossips', which features two ladies in Edwardian dress sitting on a bench - "Far be it from me to spread gossip my dear, but ..." The painted set costs £18, but it is also available as a set of unpainted castings for £10.

Plastic Warrior

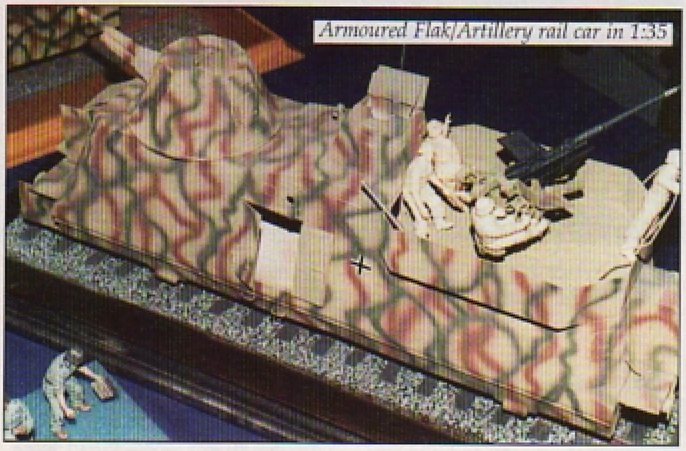
Plastic Warrior, for the collector of old and new 54mm plastic figures No 65. A Decade of Deetail; Toy Fair Reports; From Britain's Archives; The Louis Riel Rebellion 1885; The Very First Heroes, etc. Details from Plastic Warrior, 65 Walton Court, Woking, Surrey GU21 5EE. ■

BELOW: Part of the Irish Free State Army 1923 boxed set from Galloglass Miniatures.

SMALL SCALE SCENE

Robin Buckland's monthly column for military vehicle modellers

MILITARY VEHICLES


Armoured Flak/Artillery rail car in 1:35

ABOVE: Ironside (Azimut) 1:35 scale G-10 enclosed railway box wagon on show at Trucks and Tracks. LEFT: scale from French manufacturer PSP.

Azimut's 1:35 scale Mercedes staff car seen at Trucks and Tracks.

I thought I might start this month with a look back to about 13 years ago, when as a 'modeller', I was conscious of a world of resin models which I knew existed, but didn't quite know much about. The plastic kit industry was keeping rather quiet then after its growth in the 1970s. My enquiries ended up with my own magazine column and the need to find out what was going on!

Most of the resin models then were available only in the smaller scales. The resin models arrived without plans, the pieces in the kits were very fragile, being cast in polyester resin, which is more brittle than polyurethane, and most didn't come with gun barrels or axles and other smaller parts. There were also some metal models and also a few vacuum formed kits, but quality varied between manufacturers.

Where are we today? Well, despite often hearing people bemoan one thing or another, these days we are spoilt! There are more injection moulded kits available and Tamiya and Dragon are adding new releases. Other new manufacturers are also emerging, particularly from Poland, the Czech Republic and some countries of the former USSR.

A number of the new releases have also been clearly influenced by modellers and the popularity of resin models. The very success of resin kits seems to have woken up the major manufacturers to just what the market wants, and they are responding to it. As for the resin manufacturers, the standard of kits produced using resin, metal and etched brass results in some superb models now being on the market. The number of manufacturers around the world has now grown to the point where it's difficult to keep up with them all.

What else have we fought for? Well I have often talked about 'professionalism', especially from the cottage industry producers. Many now use good packaging, and most now provide assembly instructions of one sort or another. Generally, we have come a long way since those early days. Are they all good? No, there are still many things still to learn.

There is still sometimes a tendency for a manufacturer who has researched a particular subject to act 'all surprised' that their customers don't know the resulting model as intimately as they do. The need for clear assembly instructions, parts lists and scale drawings to accompany a model has increased along with the number of parts a kit is broken down into. Subject matter? Well we now see vehicles being kitted which I would once have classed as, 'in your dreams!' The result of so much market choice means that we, as modellers, have an even wider choice over what we spend our cash on.

As far as manufacturers are concerned, I think this means that the most 'professional' will thrive, and those that don't listen to their customers will suffer.

AFV Club

I have had the new 1:35 scale TOW version of the West German *Wiesel* from AFV Club arrive on my mat. This is the second variant of the model they have made, though this is the first kit I have seen. This little, tracked air-portable machine fits the description of 'small, but perfectly formed' Even more surprising is that it holds a crew of three. For a 1:35 scale kit it is tiny and on a par with things like the TKS and UE tractors of WWII. For modellers there is an excellent reference available in the Museum Ordnance Special series, on the *Wiesel* family.

The kit includes interior details in the crew compartment so you can easily leave the crew hatches open. The quality of the plastic moulding is about as good as it gets and in addition there are etched metal parts included, for parts which are just about impossible to do any other way, drive sprockets and exhaust grille being the bits in question. I found it to be one of those kits which just shouted quality as soon as you open the box. AFV Club are not the most prolific of manufacturers, but when they do have something new it is good. The Wiesel may not be among many modellers' first choices of subject, but I would still recommend having a go just to enjoy doing the kit. My thanks to AFV Club who sent this through from Taiwan. It should be available in the shops by the time you read this.

Real Models

Real Models are a company from the Czech Republic, and are imported to the UK by Bellrock Models and I have had a chance to have a look at a couple of models from the range.

One is another T34/85 turret for the 1945 No.112 style (composite) early version. It will clearly go with the Tamiya hull, and replace the kit's turret which was never one of their best. A relatively simple conversion, but I liked it for including everything you need, not only the turret shell, but a turned aluminium gun barrel, hatches and wire for the grab handles. The bit I liked in particular, however, was the inclusion of the interior elements of the vision blocks which go inside the commander's cupola. If you look at a real T34 with the hatch open these are very noticeable and on most models they are absent, but that's not the case here and for me it marked it out as being well thought out. After all, it is priced at £17.95 which while not cheap is, I suppose, about the market rate, and all you need is included.

The second conversion set is for the German Bergeferdinand, to go with the Italeri kit. This one contains a large one-piece upper hull, plus a bag of chain and smaller resin parts to make up the crane and a small etched steel fret. It is a relatively simple conversion though, of course, it is not the only such conversion available. The quality of the resin castings is good, however, and a basic instruction sheet is included. Price for this one is £25.50, both plus postal charges. These and others in the Real Models range are available from Bellrock Models, 29 Bellrock Avenue, Prestwick, Ayrshire, Scotland, KA9 1SQ.

Convoy

The Model Transport 1:76 scale range was taken over by Convoy, who have since expanded on it. Convoy are also now bringing in the range of Domis 1:48 scale resin models from Romania from which I have and example of the German *SdKfz 223* armoured car.

The quality of the resin castings is very good, and I found it went together with little problem. Even the bar aerial has been successfully done in resin, by making it in four sections rather than trying to do it all in one. Plenty of extra stowage items to add, but there's only one of these, positioned in front of the turret, I'd prefer to leave off finding it hard to imagine a good reason for blocking the forward field of view for what little armament is fitted. Instructions are provided which aren't bad, although there were still a few pieces not shown. There are plenty of photos of this machine in a wide variety of reference books and there is the Tamiya kit, if you have it, to refer to, so it's not too difficult to work out.

Prices? Well, not cheap for 1:48 scale resin models at £40 each. They are on a par with smaller 1:35 scale kits, like Ferrets and other armoured cars. On that basis, they are expensive and I wonder if this is an example of a producer in Eastern Europe overestimating the value of their products in Western Europe and on this occasion getting it wrong. Still, the product itself is good and if Convoy could negotiate some better rates with the Romanian manufacturer then it could be even better. The Domis range is available from Convoy, at 23 Mare Bay Close, St. Leonards-on-Sea, East Sussex, TN38 8EQ.

4-Mil Models

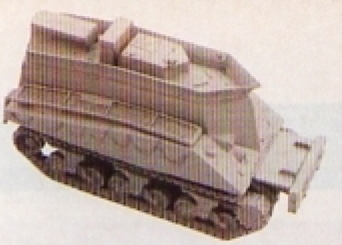
4-Mil Models continue to release some interesting 1:76 scale soft skin kits and have added another to their metal series - Kit MT70 of the Crossley Q Type 2, 3-ton 4x4 RAF Tender. In RAF terms, this was a GS (General Service) bodied truck. It is one of the less common trucks and a neat model. 4-Mil are successfully releasing a number of RAF oriented subjects, with an Ambulance on the Ford WOT 1 chassis released at the same time.

The Crossley has a very 'boxy' cab, with a slightly offset radiator. The body has skeletal sides which make it look very different to other GS body trucks. The instructions are clear enough and assembly is fairly straightforward. Prepare the chassis first and fit the cab afterwards. I use solder for the assembly of metal kits, and it worked well. The only item worth comment is the cab front which, on my example, the detail was not as crisp as it might have been, and edges were 'soft'. The starting handle also needs reducing slightly which I gather was due to a problem during the moulding process and the solution at the time has left it a little too large. Still, an interesting and unusual addition to a vehicle collection, and of course offers a wide variety of colour schemes as the RAF did vary things a good deal. Both kits built up well and are available from 4-Mil models at 1 Hag Hill Lane, Emley, Nr Huddersfield, West Yorkshire, HD8 9QT.

Matador Models

Matador Models have released another in their series of 1:76 scale conversion sets to turn the Airfix Crusader into the Covenanter. Comprising a complete new hull, which is very cleanly cast in polyurethane resin the kit has some simple discs which are put into the Airfix kit wheels to give the correct appearance. The turret for the tank is taken straight from the Airfix kit.

The Covenanter was not put into action as a gun tank, but it was used in large numbers for training in the UK and some were converted to bridgelayers. It is an attractive looking tank, however, very streamlined, and it would be relatively complex to try and scratch build. This conversion is easy to build and produces an interesting addition to any 1:76 scale collection of British AFVs. Matador Models are at 6 Cliffe Road, Barton on Sea, New Milton, Hants., BH25 7PB.



ABOVE: Matador Models' 1:76 scale Sherman BARV.

Jordi Rubio

Jordi Rubio from Spain has added more gun barrels to his range of turned aluminium accessories, neatly produced as ever, and these do look good on models.

Amongst the recent batch are a 105mm gun and mantlet for the M4 Sherman, that can go on the M4A3 or an HVSS version. Two other US guns are the 75mm barrel for the Chaffee and the 90mm M3 gun for the Pershing, complete with muzzle brake. Two German subjects then are the *L/48 75mm* barrel plus muzzle brake and mantlet plate for the *PzKpfw IV Ausf. G, H* or *J*. Then the 105mm *StuH42 L/28* plus cast white metal muzzle brake and *Saukopf* mantlet to go on the *StuG III*. Available from Jordi Rubio, Av. Gaudi, 56, 08025 Barcelona, Spain.

Fingerprint Designs

Fingerprint Designs are a new producer of 1:35 scale decals whose first release is a very original idea designed to provide the stencils for the interior of German WWII AFVs. The sheet is specifically aimed at the Academy model of the *Tiger I*, with its interior detail although enough is provided to do more than just the one model.

I don't know how popular these will eventually be, but I hope they are because it will encourage more. Full marks for originality with the first release. Fingerprint Designs are at Belmont House, 22 Kent Road, Birkdale, Southport, PR8 4BJ. Decals are available either in black or in ivory. Price is £3.50 per sheet plus postage at 10p per sheet (min 50p). Cheques payable to S. Switala.

S&S Models

S&S Models continue to build up their series of polyester resin wargames models. Among recent releases is a very neat German *Aufklarungspanzer* on the *PzKpfw 38(t)* chassis fitted with the *Haenglafette 2cm* armed turret.

Matador Models' 1:76 scale British 'War Flat' with a Churchill on board.

It is a simple model, just hull, turret and two track units in resin, plus a metal gun barrel. Clean up on the castings was quick and easy and the assembled machine looks good. Once painted it is very acceptable and wargames are a slightly different market to the collector, where quantity at a reasonable price overrides quality. In this case it is a very presentable little kit which I think looks good. S&S are at 22 Briar Close, Burnham-on-Sea, Somerset, TA8 1HU.

Small Scale Productions

Small Scale Productions have produced a 1:76 scale version of the *SdKfz 247* command car in polyurethane resin and metal. It is a fairly quick assembly job. and the only thing I didn't like about it was the half figure included. He just doesn't look right to me and it is simple enough to find a replacement, or as I did, simply leave it out. You might recognise it as simply a smaller version of the 1:35 scale model in the Sovereign range which I believe was mastered by John Tassell. It is the first example I can recall of the *SdKfz 247* in 1:76 scale, so I am sure will be popular.

Produced to a good standard, Small Scale Productions continue to add some original subjects to their range. At the same time they are also doing some small, but good quality little decal sets, though these are mainly for American equipment. They do both white and yellow versions with stars, unit markings and so on. Small Scale Productions are at 160 Green Street, Enfield, Middlesex, EN3 7LB.

Eduard

Over the past few years Eduard, produced in the Czech Republic, has developed into a huge range of 1:35 scale etched brass accessory sets. You may find that they have begun to use nickel coated brass for their AFV range (remember they do an equally wide number of aircraft sets), but they remain, I think, good value for money.

Two of their recent examples included set 35 166 for the Academy kit of the M997 Ambulance (Hummer), with two etched frets and a very good set of assembly instructions. Engine mesh, radio panel and a multitude of other replacement and accessory parts will add neatly to the basic kit. The same comments apply to set 35 173 for the Academy kit of the M18 Hellcat. Track guards, tie-downs, engine deck screens and other detail parts, including a small printed piece of clear plastic with the instrument panel on for the driver. I believe they do a set for the new Tamiya GMC, but I haven't seen it. All very well produced and presented. The Eduard range is available in the UK from Four Plus U.K., 29 Westwood Gardens, Hadleigh, Benfleet, Essex SS7 2SH.

Cromwell Models

Cromwell were at Trucks and Tracks as usual. Not as many really new vehicle items as we have seen in the past, though they did have some conversion sets for the early cast hull Shermans, to go with the excellent Dragon models. Complete kits came in the first of their Ferret family. A number of new figure sets, however. Nothing unfortunately in small scale. Contact Cromwell Models at Progress House, 39 Kirkpatrick Street, Glasgow, Scotland G40 3RZ.

Stencilit

Stencilit is a name we haven't seen for a bit, but they were at Trucks and tracks this year with a couple of new releases in the range of 1:35 scale etched brass marking stencils which really are very neatly produced indeed. They take a bit of getting used to, but the results can be very good. One is for the modern German *Bundeswehr*, and fits in well with the current trend of models, especially from Revell and AFV Club. It includes tactical markings as well as some registration plate examples and other bits and pieces.

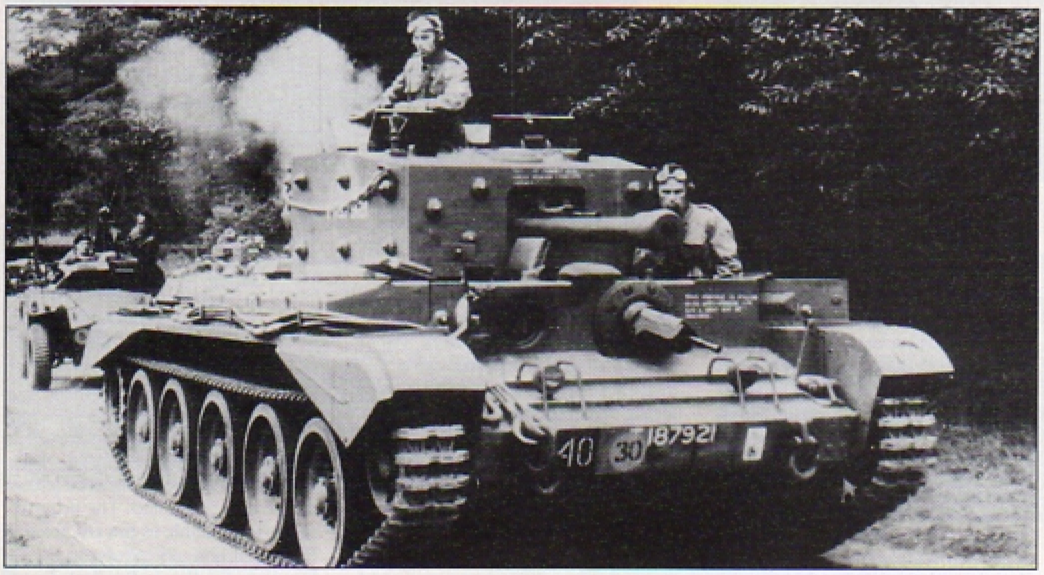
The other is back to WWII, and is for the Eastern front. It will go well if you have the Squadron Signal book on the same subject giving some interesting markings for various nationalities. I particularly liked the way two or three go together with the aid of four, pin hole locators to build up the more complex ones, such as the Finnish *Hakaristi* (I hope I've spelt that right!). Both are available from Stencilit, PO Box 1411, Glasgow, Scotland G46 7DF. ■

DESPATCH

The Editor welcomes readers' letters for publication which must always be accompanied by the writer's full name and address. The address will be published in full if the letter is interpreted as a request for information to the readership. Otherwise only the writer's full name will be published. Letters are not, under any circumstances, altered or severely edited; however, they may be shortened because of available space restrictions.

Letters to the Editor intended for publication should be addressed to "Despatch", Military Modelling, Nexus Special Interests, Nexus House, Boundary Way, Hemel Hempstead, Herts HP2 7ST.

READERS' LETTERS



Wrong decals

Dear Sir,
Following the review of the newest Tamiya 1:35 scale Cromwell Mk.IV kit (MM Vol.28 No.2, 'Atten-Shun!' p.52), I would like to point out that this otherwise excellent kit may not be correctly finished straight from the box, as vehicle T187921 with the decals supplied.

That vehicle, a personal mount of C-in-C Polish 1st Armoured Division, Gen. St. Maczek, was in fact a Command Tank fitted with dummy wooden gun barrel of different length and shape, without holes in the 'muzzle brake'. Moreover the Command Tank was fitted with three aerials (only one supplied with the kit), and no gunsight equipment was fitted on the turret.

Please find enclosed a photo of General Maczek's Cromwell Mark IV T187921. Note horseshoe on left front guard!

Wojciech J. Gawrych
Poland

Mr Angry

Dear Sir,
I am an AFV modeller too, but why do readers who also claim to be write such rude letters like John Farthing did in Vol.28 No.5. Why do they always claim to represent the thoughts and opinions of 'others'. His letter makes me so angry. Such breathtaking arrogance! The content of *Mil Mod* obviously changes with trends as every honest reader knows.

He claims, quote; "It seems to me and a great many others", or, "I think that I am not alone when I say that ..." Another case of the minority claiming to speak for the majority and conjuring up a host of followers who hang on to his every word. Dream on!

On what, except that he can count a few pages, does he base his reasoning? Pure speculation? He doesn't even seem to realise that the output of AFV kits has slowed (have a look at Dragon's latest catalogue and consider the reduced outputs of major resin kit manufacturers), whereas the output of figure models has increased? And just what is 'main stream?' More Panzers (yawn) no doubt!

Then we have the 'kicker'. He just had to get around to it sometime. Other magazines are better he tells us. So if they are better, why the hell is he even bothering to write to this magazine which he decries so rudely? Does he consider himself a crusader for AFV modellers - once again, breathtaking arrogance. Then he tells us he is interested in 'Star Wars'.

In closing, I totally agree with your review policy, which your arrogant letter writer can't seem to get his head around. I'm not always in accord with everything you and your reviewers say, but your reviews are, above all, honest. I remember the Verlinden Stug review.

David Robson

Arrogant cheek!

Dear Sir,
I feel I have to respond after reading J. Farthing's letter (Vol.28 No.5) - what arrogant cheek! Especially from someone who claims to have been modelling only for 10 years or less.

That the hobby is currently riding on a high is fortuitous. The plethora of modelling magazines, aids and accessories is certainly a boon to all modellers. Twas certainly not always thus.

I would personally like to thank those who kept faith during the 'dark ages' (late 1970s - early 1980s). I, for one, am always pleasantly surprised to find new areas of inspiration in ***Military Modelling.***

R.J. Lang

The same old chestnut

Dear Sir,
Here we go again the same old chestnut. The next thing these 'special interests' characters will require is a full centre-fold of Her Majesty the Queen in a Star Wars' uniform on an Inter-Galactic Battleship!

Sorry for that, childish as it is, but who could resist after reading the letter, 'You are just plain lazy' in 'Despatch' Vol.28 No.5 which popped through my letter box an hour ago. ***M.M.*** from its first issue was, and is, for military modelling as is *Aero Modeller* for aircraft, *Railway Modeller* is for railway enthusiasts. When the wargamers magazine 'Battle' folded, their interest was allowed to expand in ***M.M.*** until it almost commanded the whole. Subscribers votes altered that, and now they are still catered for with *Practical Wargamer.* As a reader from the first issue, I think the editorial staff do a fine job, considering the scope modelling covers, let them so continue; (with an occasional dig!)

If the 'late 1980s' reader wishes his 'special interest' to be more fully developed without consideration to all the other aspects in modelling, let him get off his bum, enter the commercial world and start his own AFV magazine, but remember you'll need readers. It's better to have a share than none at all.

I avidly read every contribution in each issue, even though some are not of my particular interest. To admire the artistic values, constructional skills, that people have and are prepared to share with all the readers is terrific. Model shops will usually open a box to allow you to inspect the contents, if you don't want to get seen off, so who needs a review?

To the editorial staff, I say more power to your elbows and keep up the good work.

Ted Wright

Sad sniper

Dear Sir
Further to the letter by John Farthing in Volume 28 No 5.

I see the sniper's are out again. How can Mr Farthing complain about the lack of articles on AFVs in the magazine. If he looks back over the last few years there have been more articles on this section of our hobby than anything else. So much so that some of us have affectionately christened the magazine 'Tanks Monthly'. If anyone has cause to complain it must be the uniform purists.

Having said that the editor has to follow trends and, in the end, can only publish what he is sent. Mr Farthing can obviously put pen to paper as his letter proves, so why doesn't he put his 'money where his mouth is' and write a few articles on his subject!

Mr Farthing has also got his facts wrong regarding the quality of the magazine, compared with some of its competitors. He has only to look at all the magazine's sales figures, which can be found in the public domain, to see that ***Military Modelling*** sales have held steady over the years.

Who does Mr Farthing think he is by taking a personal swipe at the Editor with slanderous remarks, that he is 'lazy'. I doubt that Mr Farthing has ever written an article or he would realise the amount of work that has to go into it, never mind currently producing over 18 issues of the magazine a year and overseeing others. I would like to see him swap places with the Editor for a few weeks to see how he gets on.

The things that Mr Farthing and other sad sniper's like him seem to forget is that this is a hobby. Ninety-nine per cent of us go to work to earn our living and get the hassle, and the hobby is there purely for our interest, enjoyment and relaxation. So Mr Farthing, (and others like him), if you are not enjoying the hobby I suggest you change to marbles or train spotting.

Please keep up the good work on the magazine

Gary Gibbs

Decries the hobby

Dear Sir,
I am writing this letter in reply to Mr John Farthing's letter in Vol.28 No.5.

As usual I was eagerly awaiting my copy of *Military Modelling* and looking forward to reading the articles, of which Despatch is one of my favourites. I used to like it because of the way modellers put across their views, sometimes pointing out the odd discrepancy, all I thought in the hope of improving a hobby I have been involved in for 20 years.

Now it seems I have noticed another type of correspondence, one that not only picks off points, but actually decries the hobby the authors are participating in, a somewhat strange concept. Perhaps I am missing something in my hobby. As you have guessed by now, I am one of the 'unclean', yes as I bow my head in shame, a figure modeller. One who spends many hours trying to produce that perfect figure.

I also like to think I am a sensible person, knowing that if I spend this much time on a project, then so must other modellers whatever they model, be it aircraft, ships, figures or AFVs. Though now it seems all I have to do is throw them together. The way Mr Farthing describes it, I don't have to worry about research, mixing correct colours, he obviously knows a short cut. I wish he would share it, I could avoid a lot of work and frustration.

To say that there are only two figure modellers, or should I say, imply that, is wrong. We shouldn't pull each others disciplines to pieces, in a hobby that needs all its members. I hope that he sees that by offending the people he has , he's done more harm than good.

I know that my letter is just one of the many that will point out the flaws in Mr Farthing's letter. Does it really matter that some months I read more about AFVs than figures. I don't think so, it's all swings and roundabouts as the saying goes. As to only doing reviews of donated kits, would I be right in saying that if you bought all the review kits, my monthly fix of *Military Modelling* would increase in price dramatically.

I'd also like to point out that this letter caused me a lot of earache from a certain model widow. She saw the letter and now wonders what I do most nights at my modelling desk. If it's so easy, why isn't the house full of many masterpieces and 'best in show trophies?'

Perhaps, like Mr Farthing says, I could always resort to Morris dancing. Is that the jingle of bells and clunk of wood on wood I hear?

R.G. Snelson

Get your bloody eyes tested!

Dear Sir,
I am not in the habit of writing to magazines, etc., but having been a reader of *Military Modelling* since its inception, I feel I must comment on the letter by John Farthing, published in Vol.28 Issue No.5 (17th-30th April).

Is Mr. Farthing reading *Military Modelling* or some other publication? For some considerable time the magazine has become known as 'Tanks Monthly' among the figure modelling fraternity as it seems that good, well-researched articles on uniforms and figure modelling now appears to be the exception rather than the norm, with military hardware seemingly to take precedence.

Reading through Mr Farthing's letter I feel if all his references to 'tanks' and 'AFVs' were transposed with his comments on 'figure modelling', etc., he would adequately give vent to the feelings of very many figure modellers and students of uniform.

Which brings me to another point. Why are critical letters nearly always couched in such a disagreeable manner? Surely it is within the scope of anyone able to put pen to paper to criticise without being nasty or sarcastic. Although I haven't been satisfied with the contents of the magazine from my own personal point of view, I do appreciate that the Editor is 'between a rock and a hard place' when it comes to trying to keep a balance to interest all readers. However, I think there is something that many of us forget - the Editor can only publish those interesting articles contributed by the readership and if the balance of articles received is dealing with AFVs, or vice versa, so be it.

However, ending in the same vein as your correspondent - Mr. Farthing, get your bloody eyes tested!

Stephen Dickens

'CRIES FOR HELP'

● At the moment I'm collecting information on the Land Rovers used by the SAS in the Gulf War. Everybody knows the Pink Panther by Tamiya, but the latest version is a completely different vehicle. I've written to some departments of the British Army and the Imperial War Museum, but nobody had photographs of the vehicles during that conflict. The only photo I know is in the book *Bravo Two Zero*. Maybe readers can help me in my search.
Theo Naus, Esdoornstraat 4, 5995 AM Kessel Lb, The Netherlands.

● I have for some time now been trying to locate high quality figures dealing with The French Foreign Legion, both past and present time periods. Figures suitable for display and collection, similar to British manufacturers such as Tradition, Britains and HM of Great Britain. If you are aware of any manufacturers of shops in France or Belgium I would greatly appreciate a reply to my inquiry. Thank you for your assistance.
Alister Hoult, 76 Kirkdene Drive, West Hill, Ontario, Canada M1C 2N7.

● I am looking for British AFV crew or replacement heads in 1:35 scale from around 1970 until the late 80s, wearing the older style AFV helmet that was introduced with the clansman radio system. Most of the figures I have seen are of the newer style helmet that wasn't introduced until the late 80s. Having crewed in both CVR/T, Fox and Chieftain around this time, I would like to crew up the models from this period that I have made.
Tim Roberts, 42 Lanehouse Rocks Road, Weymouth, Dorset DT4 9DT.

● Has anyone plans of the *PzKpfw I Ausf A*, or even the instructions of the Accurate Armour kit? I am trying to scratch build a model of it, I also need painting and marking details, especially of the interior. Any help will be greatly appreciated.
Niall Glynn, 4 The Covert, Woodfarm Acres, Palmerstown, Dublin 20, Ireland.

● Desperate! Having just started constructing the excellent M26 Dragon Wagon (armoured cab version) by Des Resin, I have stupidly lost the instruction leaflet. The house has been turned upside down, but no luck. If anyone can help, please contact me ASAP. Any costs will be met.
Ian Martin, 3 Lagrannoch Drive, Callander, Perthshire, Scotland FK17 8DW. Tel: 01877 330961.

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SC-7 GATLING GUN CREW One sailor carrying ammunition.
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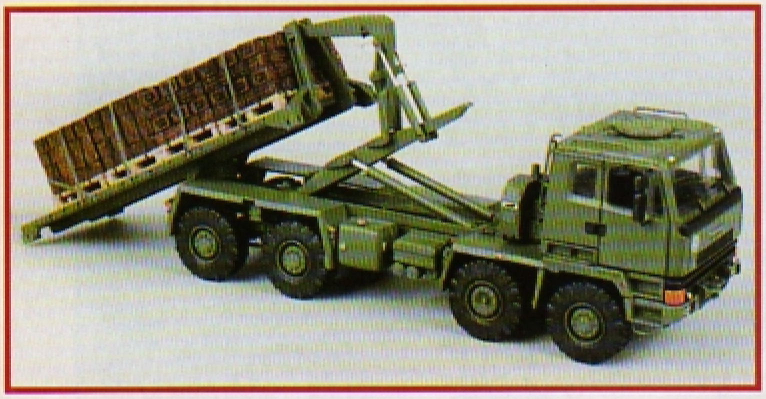
ATTEN-SHUN!

The Editor welcomes product samples for review which should be sent to the Editorial Offices, Unless a prior arrangement has been made with the Editor, review samples will not be returned.

NEW PRODUCTS REVIEWED



CMSC

It is some years ago now that I photographed a scratch built DROPS model at a show, and where that photo which appeared here in *Military Modelling* generated the most enquiries I can remember about whether anyone did a kit of it. That model was the Leyland DROPS and trailer and it was made by Tim Neate. Now, years later, Tim has mastered a DROPS which has appeared as part of the CMSC range of 1:76 scale models. It is presented in a mix of resin and metal parts, as is now usual with this range.

The quality of both is simply excellent. The truck can be modelled with the lifting gear either up or down, and various accessory sets available allow you to add different loads. The basic flat racks can be loaded up with light AFVs of the CVR(T) family (also in the CMSC range), ammo or stores pallets, or you can use either a water tank or decontamination set.

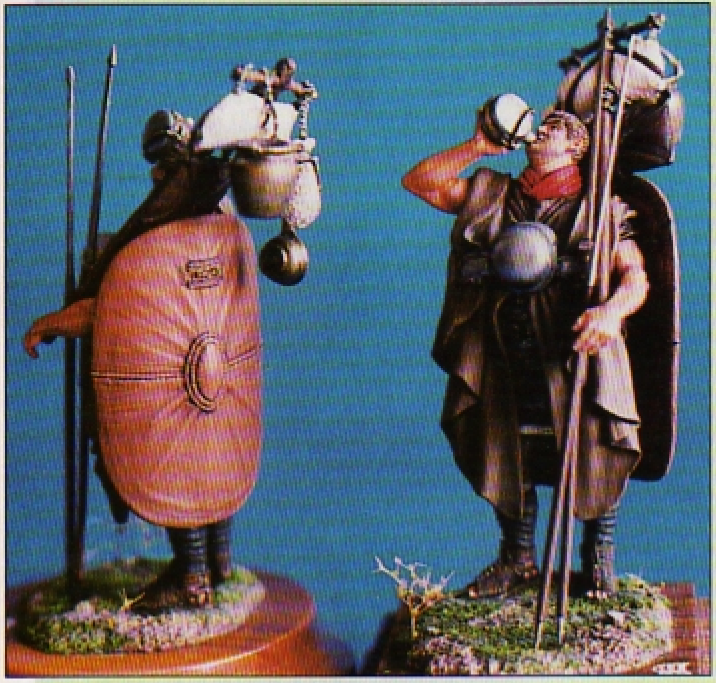
The flatbed trailer is also available, so you can end up with a very impressive combination. Spare flat racks are available separately, so a number of diorama possibilities are opened up. Equally it is not uncommon to see them with a stack of empty flats as a load in itself.

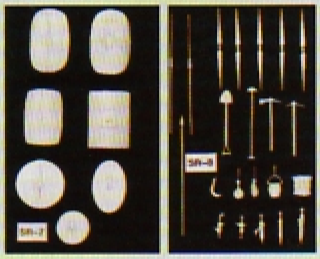
It is very much a kit though, with a good deal of assembling to do, and not one or two bits of resin that just fall together. An assembly instruction sheet is supplied, and you will need it with the lifting gear on that chassis. More than just a simple truck, this is very much a 'system' kit, just as the real thing is. It captures the look of the big Leyland a treat, and makes up well. CMSC have added a long-awaited subject to what has grown into a high quality range of 1:76 scale models, and which has managed to happily include a mixture of both modern and WWII subjects.

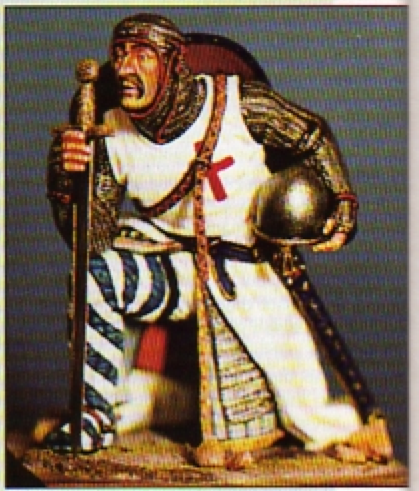
R.B.

Price £17.95

CMSC, 36 Gray Gardens, Rainham,
Essex RM13 7NH.







Soldiers

Produced in Italy, Soldiers di Marco Lucchetti, have produced a white metal figure kit of a Roman Legionary in Winter Marching Dress 1st century BC (SR-6 £11). The 54mm legionary is drinking from a flask, wears a cape with his shield slung on his back. He carries two pila and a pole with his personal kit wrapped in a bag slung on top of it. His iron helmet is slung and resting on his chest.

Accessories for 54mm Romans are SR-7 £11 seven different shields - square, round, oval and rectangular with rounded corners which, I know, is a contradiction in terms! SR-8 £11 contains pila, swords and daggers, wooden stakes for use in marching camps, entrenching tools, flasks, basket, etc.

SP-3A £11 is a 54mm kit of Philippe August, King of France, in Soldiers' Third Crusade 1189-92 series. Philippe is kneeling, shield on his back, his sword before him tip down making the sign of the cross with the hilt and guard. It is a good, 'knightly' pose and one that lends itself very well to a small vignette with another figure.

Historex Agents, Wellington House, 157 Snargate Street, Dover, Kent CT17 9BZ stock the Soldiers range.

K.M.J.

Prices in text

Soldiers di Marco Lucchetti, Via
Madonnina del Grappa 13, 20025
Legnano (Mi) Italy.

Minimeca

Very fine wire and rigid metal tubing have been sent for review by Minimeca Española S.L., a new name to our column. My very limited Spanish translates Minimeca's letterhead to describe the company's function as 'manufacturers of precision metal tubes for electronics and industry in general'.

Intended for detailing model aircraft in 1:72 and 1:48 scales with Pitot heads, machine-gun and cannon barrels the tubes, especially, have connotations towards gun barrels for AFVs in the same scale and larger. Also, figure modellers will find them useful for suitable rifle and pistol barrels. The fine wires available make superb vehicle radio aerials 1:76 scale upwards. It's also possible to fit wire into the tubes to produce a telescope effect, on which only a limited imagination will place any restrictions.

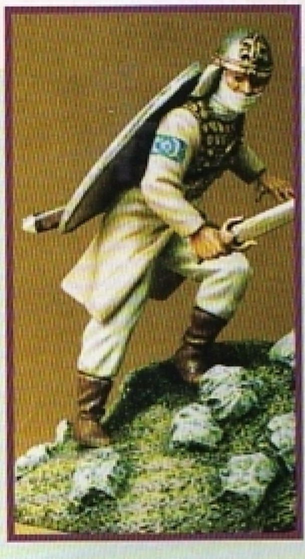
Examples of tube sizes are:
No.102 0.6mm x 10mm (20 pieces);
No.103 0.6mm x 20mm (20 pieces);
No.104 0.8mm x 10mm (20 pieces);
No.105 0.8mm x 20mm (20 pieces);
No.109 0.6mm x 250mm (5 pieces);
No.110 0.8mm x 250mm (5 pieces);
No.111 1mm x 250mm (5 pieces).

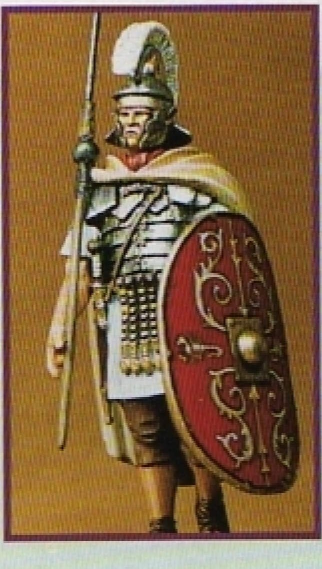
Wire aerials for 1:87, 1:76 and 1:72 scales (20 pieces) is listed as No.112, whereas 113 has an assortment of six tubes, 0.6mm, 0.8mm and 1.0mm. Radio aerials for 1:35 scale vehicles (5 pieces) is reference 3501. Unfortunately, no prices were quoted, but a letter or fax to Minimeca should bring results.

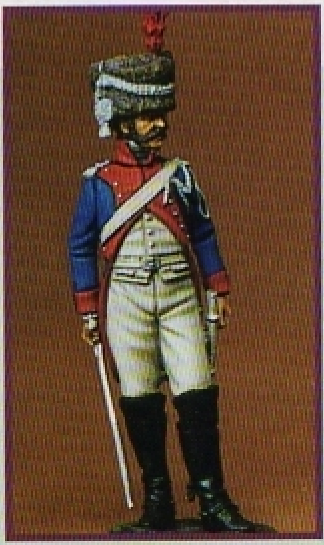
K.M.J.

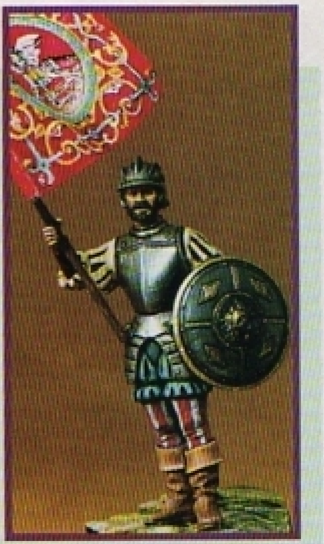
Prices not available

Minimeca Española S.L., C.I.F. B-
50076611, Escultor Lobato 15, Bajos,
50007 Zaragoza, Spain.
Tel/fax: 25 09 38.









El Viejo Dragón Miniaturas

Recent releases from Spanish manufacturer El Viejo Dragón Miniaturas are six 54mm white metal figures kits, which includes a mounted knight, and a large scale bust of a 'Bengal Lancer'.

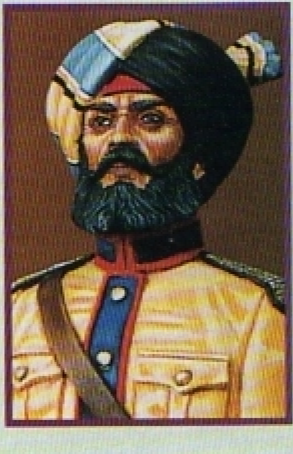
SAF4 is a pair of female Egyptian dancers; CG18 a 13th century Spanish Andalusian Musulman; CG20 Praetorian Guardsman; C1F13 Catalonian Gendarme 1811; C2F10 Pizarro's Standard Bearer. Castings are clean and well defined; fit of parts is good making assembly easy, however, be prepared, there are joins to fill here and there.

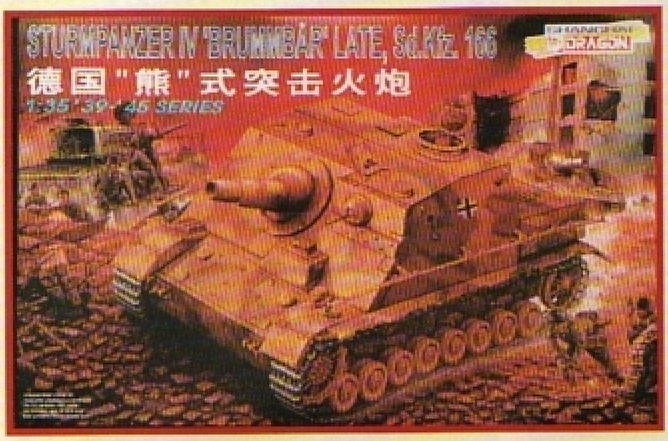
The 54mm mounted knight (CG19) is packed in a VHS video cassette box and the box top illustration is finished as Henry VIII at the Westminster tournament in 1511. The 24-part kit can be painted or modified to represent any 16th century knight. Two of these figures can produce tilting knights because the centre barrier rail of the list is included in the kit.

The large scale bust of the 'Bengal Lancer' is the 1st (Duke of York's Own) Lancers, or Skinner's Horse, c.1900, who wore distinctive yellow uniforms. The bust is in kit form, a cast base and sort of pylon mount are provided. I don't really like this support arrangement, with the heavy assembled bust in place it's heavy and inadequate, and I would suggest an alternative.

K.M.J.

Prices not available
El Viejo Dragón Miniaturas,
C/Margarita Nelken 11, urb.
PqLagos, 28240 La Navata,
Madrid, Spain.





Shanghai Dragon

A 1:35 scale kit of a late-pattern *Sturmpanzer IV Brummbär (SdKfz 166)* No.6081 has been released from Dragon's Shanghai factory in mainland China into the '39-'45 Series. Following the now well-established, tried and tested Dragon formula, the basic *PzKpfw IV* chassis and *Brummbär* top form the basis of the 35 injection moulded plastic sprues, plus hull bottom with 'hundreds' of parts, many of which will not be required.

When you open this box the sheer amount of bits in it will surprise and impress you. The suspension is based on Dragon's *Jagpanzer IV*, and there's even the sprue for the turret (not required) from the infantry version of the *s.SP* railcar in there, where only the hatch ring and cover are needed! Separate injection moulded track links and decals are provided. AFV modellers' spares boxes are certainly the more richer after building a Dragon kit - all the rubber-tyred roadwheels are not needed because steel resilient rim types are provided in the kit.

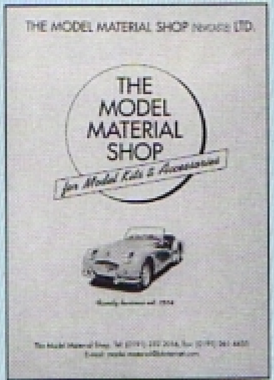
The later versions of *Brummbär* had all steel wheels, skirt armour and a thick armoured casement type mounting for the machine-gun added to the upper left of the superstructure, which projected slightly forward of the frontal plate. The machine-gun was certainly needed for defence, although its field of fire was severely restricted to the forward area only, hence the 'pistol ports' in the superstructure sides. Without supporting infantry the Brummbär was 'dead', especially if discovered by determined and suitably equipped infantry anti-tank teams.

Dragon's *PzKpfw IV* chassis (now the bugs have been ironed out) is very good and the refined parts assemble with little effort, and there is very little filling to do. The 'boxy' *Brummbär* is visually impressive and would look good in an diorama with ruined buildings and plenty of rubble with a few figures.

Our sample came direct from Dragon, but LSA Models, 3 Hawkins Crescent, Shoreham-by-Sea, West Sussex BN43 6TN (tel: 01273 592775/0973 551470/01273 705420) have advertised it for £13.99 - excellent value for what you get!

K.M.J.

Price in text
Shanghai Dragon Models & Toys Company Ltd., 1238 Wu Zong Road, Shanghai, China Post Code: 201103.


THE MODEL MATERIAL SHOP (Newcastle) LTD.

THE MODEL MATERIAL SHOP

for Model Kits & Accessories

The Model Material Shop

Where to find the right tools, model kits, accessories, materials, etc., isn't always easy and usually entails searching various catalogues and lists. To the rescue is a good selection of tools and materials, between two covers, found in the catalogue from The Model Material Shop (Newcastle) Ltd. It's available now, price £2.50 plus £1 postage from The Model Material Shop (Newcastle) Ltd., 1 Marlborough Crescent, Newcastle upon Tyne, NE1 4EE. Tel: (0191) 232 2016. Fax: (0191) 261 4455. E-mail: model.material@btinternet.com

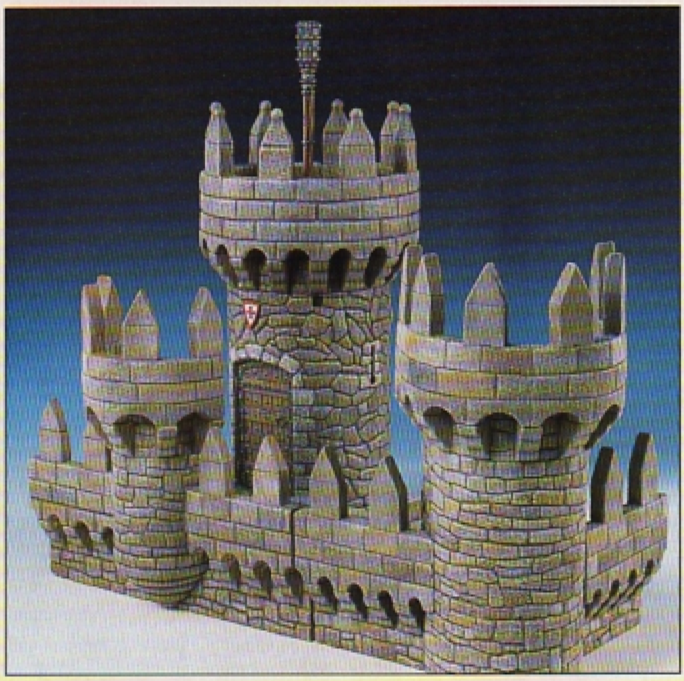
Alhambra Models

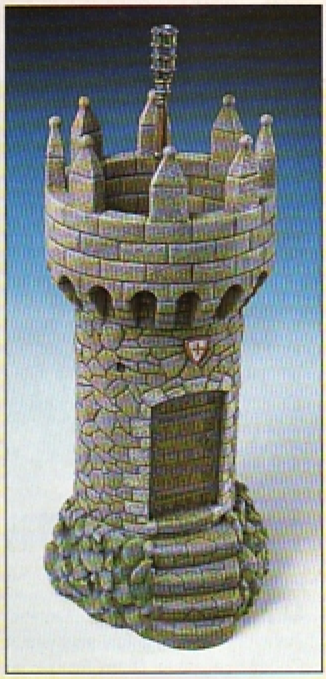
Samples of the latest 1:35 scale releases from Alhambra Models have been sent for review - 35.240 a Templar Tower Section III and 35.602 a display base for medieval figures, 'Agincourt 1415'. Both are cast in plaster (ceramic) and ideal for displaying 1:35 - 1:32 scale figures.

Other new releases are 35.229 Merlon XIII Century Module 6; 35.601 Hastings Battlefield 1066; 35.707 Stratum Stone and Dry River Bed; 35.976 Norman Noble Knight 11th century; 35.977 European Medieval Halberdier 15th century.

K.M.J.

Prices not available
Alhambra Models, Plaza Juán Zorrilla 3, 28003 Madrid, Spain.
Tel/fax +34-1-554 96 21.





Bonaparte Figures

From Bath Miniatures two new large scale busts have been released in the Bonaparte Figures range - a British 10th Light Dragoon (£16.99) and a Landsknecht 'Triumph of Maximilian' (£39.50), both plus 5% postage and packing. Both models will require a display base and the pillar or rod to mount the bust to it because these parts are not supplied.

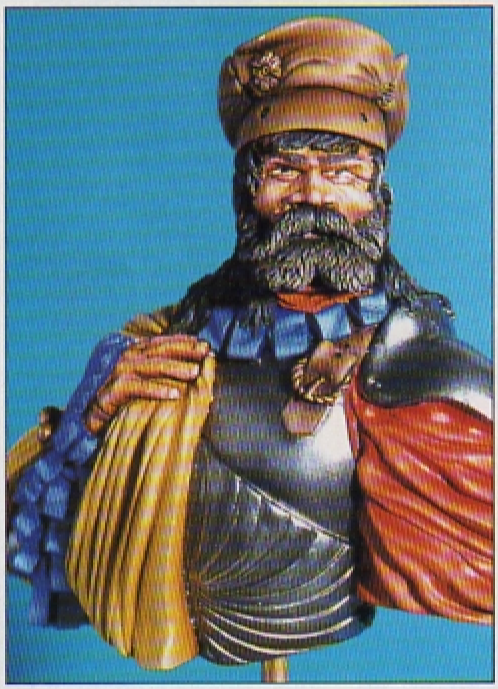
The Landsknecht is a hefty one-piece polyurethane resin casting, with his leather cap as the only other part in the kit that needs adding. Detail is good, sharp and well defined; the right hand and arm has been included along with a flag or banner over it to display a device or similar.

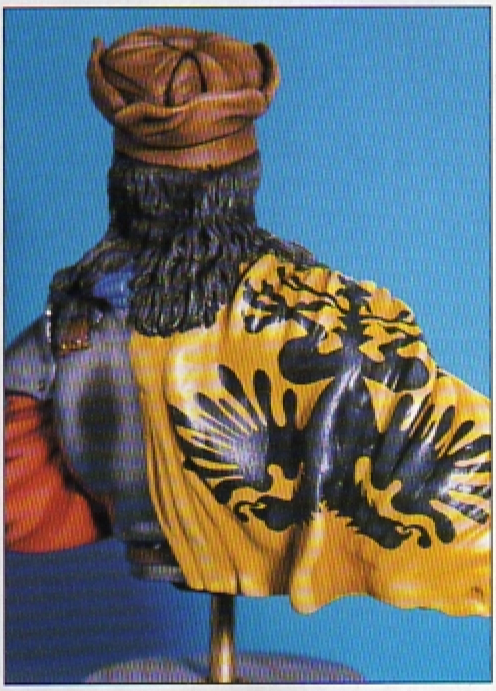
The 10th Light Dragoon paints up a treat. The coat and sleeveless mantle are dark blue with yellow facings, white piping and cross belts which contrast well. The fur crest on the Tarleton helmet and leather skull along with the turban offers the challenge of painting different textures, relieved by the metal chains binding it and other metal fittings on peak and helmet front.

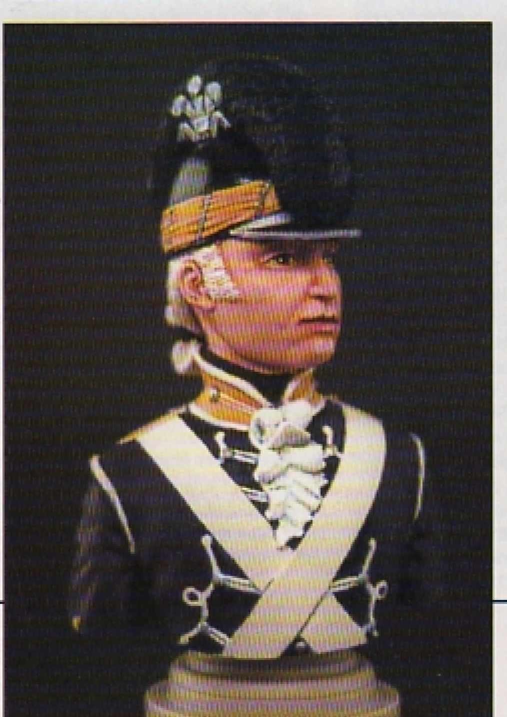
The only thing that could be improved or changed is the Tarleton helmet peak which is a little on the small side and could be replaced with a deeper article, perhaps with an upward sweep from both sides to a centre crease. Also, the epaulettes are the wrong shape, but these are being corrected by the manufacturer.

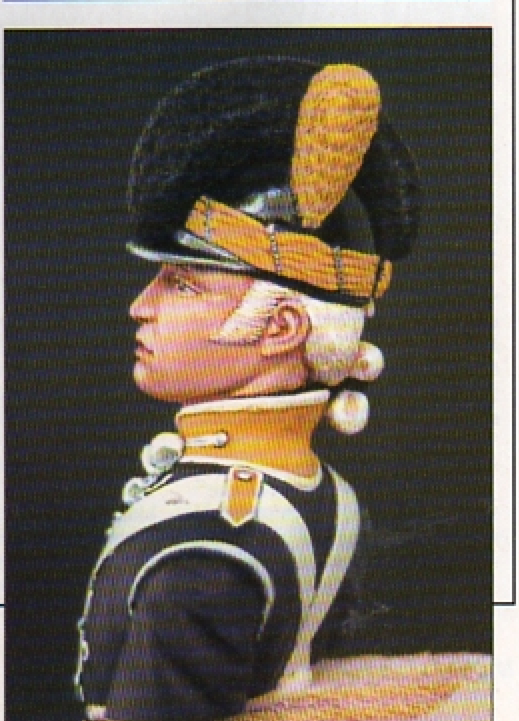
K.M.J.

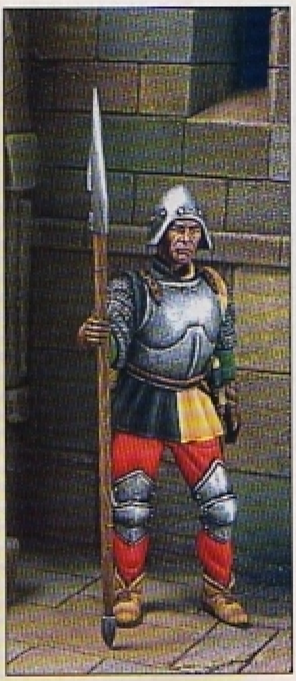
Prices in text
Bath Miniatures, 1 Queen Street, Bath BA1 1HE.



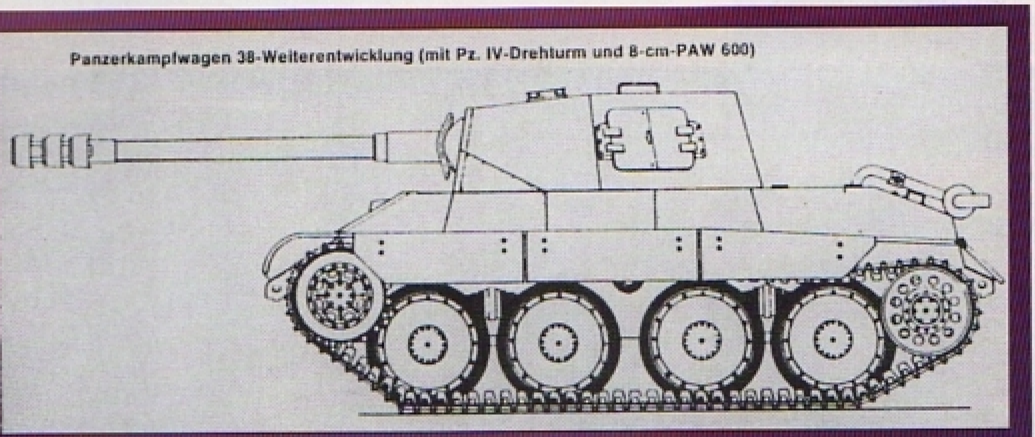








New Connection Models



Panzerkampfwagen 38-Weiterentwicklung (mit Pz. IV-Drehturm und 8-cm-PAW 600)

Via Historex Agents, the New Connection Models 1:35 scale kit (NC 3563) for another German WWII 'design on paper' the *PzKpfw 38-Weiterentwicklung mit Pz. IV Drehturm und 8cm PAW 600 Vorschlag*. Basically, this is a *PzKpfw 38(t)* chassis and modified hull, mounting a simplified *PzKpfw IV* turret minus the commander's cupola, reduced front and side armour and stowage, but fitted with an 80mm gun. And what you get in the kit is basic too - but it is expensive! The kit parts are designed to fit on the Dragon Models' *Hetzer* series; the Italeri kit can be used, but it needs certain alterations for the parts to fit.

Had the *PzKpfw 38 Weiterentwicklung*, a Krupp design of 1944, seen the light of day it would have been a fairly potent tank destroyer - a tested production chassis with a new weapon - the *PAW 600* which fired 80mm hollow charge rounds with a very low recoil to a range of around 700 metres.

New Connection's cast resin parts are very good and there is little to clean up on the castings. The gun barrel is a brass tube which fits onto the mantlet sleeve and a double-baffle muzzle brake fits the other end. The hull top is a one-piece castings as is the *PzKpfw IV* turret with its fittings supplied as separate parts. It is, perhaps, best to make the turret up closed down as no gun breech or other interior details are provided. Unless, of course, you have full info on the *PAW 600* breech and can make an educated guess at the interior fittings.

An exploded drawing of how everything goes together is provided in the kit box. It is pretty straightforward and the result is certainly something different. It is, however, as I've already said, pretty expensive at £35.60.

Historex Agents, Wellington House, 157 Snargate Street, Dover, Kent CT17 9BZ.

K.M.J.

Price in text

New Connection Models, Dorfgütingen 40, D-91555 Feuchtwangen 40, Germany.

Weasel Armour

Mike Potter is the driving force behind Weasel Armour, a range of 1:76 scale (20mm) vehicle kits primarily intended for wargamers, but models that can be further detailed by collectors. The models are simple, cast in white metal, and usually consisting of a one-piece hull with track units and turret, (as appropriate), as separate one-piece castings. Detail is more than adequate for wargames use, however, it is challenging to add that bit extra and produce something more attractive.

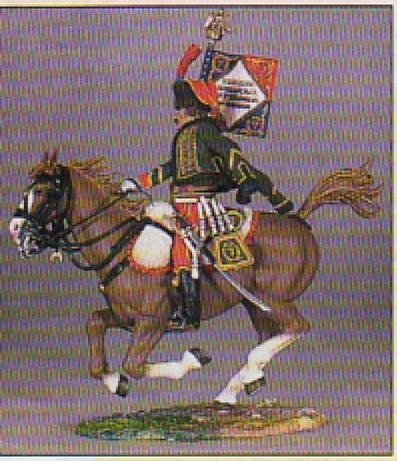
Sent for review were the tiny Soviet T27 Light Tank (£4.75) and T40 Amphibious Tank (£6.50), the British CVR(W) Fox Armoured Car (£8) and the British 105mm Light Gun (£6.50). No assembly or painting instructions are supplied probably due to the simplicity of the kits. Initially, however, I'd recommend getting hold of a photo of the real thing to see exactly what you're building. There's the odd moulding pip to remove here and there, but the parts fit together with little effort. Once primed and undercoated the proof is in the painting.

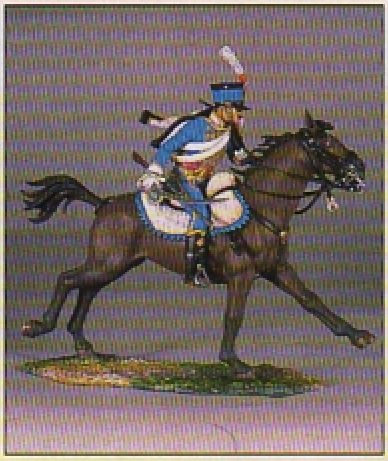
Mike Potter also makes masters for other manufacturers and is open to suggestions for further models from clubs, etc., where more than 'one model' will be required. If you are interested contact him with your ideas, tel: 01323 649809. On orders please make cheques payable to Mike Potter.

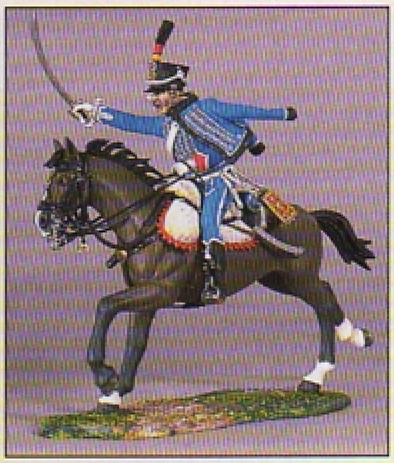
K.M.J.

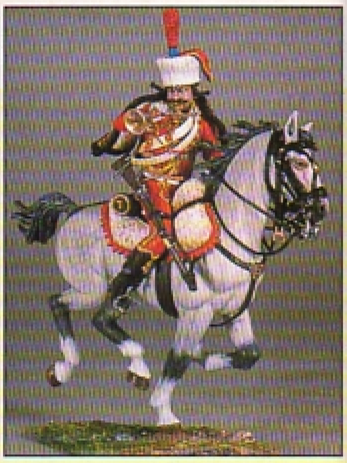
Prices in text

Weasel Armour, 56 Ringwood Road, Eastbourne, East Sussex BN22 8TB.





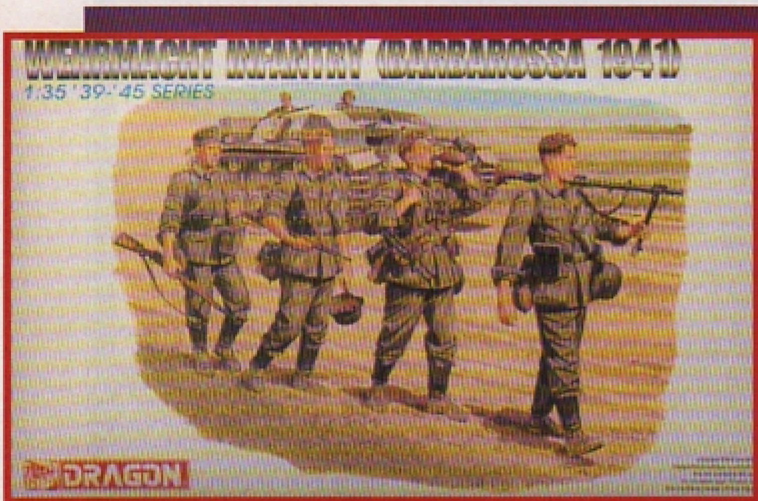


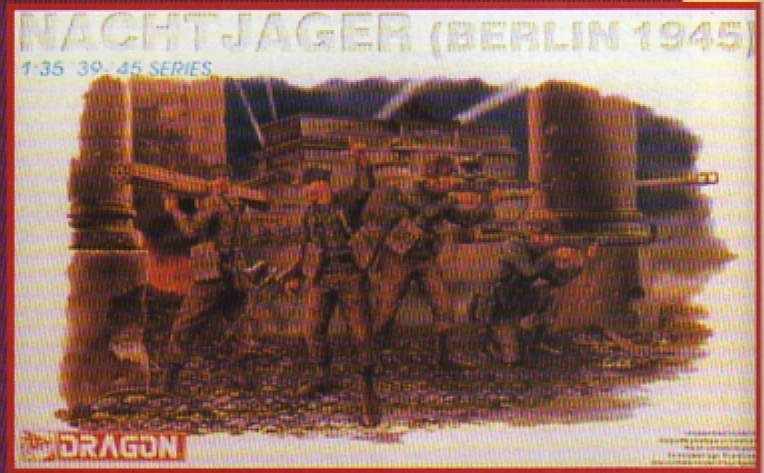


Andrea Miniatures

The first four of five 54mm mounted French Napoleonic Hussar kits have been released by Andrea Miniatures - S7-F11 Hussar Standard Bearer (£36.50); S7-F12 and S7-F13 Hussar Troopers (£35.95); S7-F14 Trumpeter (£35.95). The officer (S7-F15) is to follow. The idea is interchangeability of parts amongst the troopers to create more varied figures from the basic kits.

The figures were designed by J.M. González and Andrea Studio, and are well up to Andrea's high standard of production, being superbly well cast. An etched brass fret is included with each Hussar which provides shako plates, cross belts, sabretaches and numbers. The standard bearer has a sheet of full colour printed flags for mounting. A full colour sheet of schematic drawings with all the French hussar regiments is provided as a guide for painters. Each kit also has a choice of two heads; one wearing a shako and the other a fur busby. The faces too are different, with different expressions. Where only one horse's hoof is in contact with the ground and has to support the weight of the mount and rider the leg has had a steel rod cast integrally. Certainly a super series of figures to look forward too. However, the models are a bit on the expensive side.





Dragon Models Ltd

Two new sets of 1:35 scale injection moulded plastic figures, in kit form, were recently released by Dragon into their '39-'45 Series - one early WWII and the other very late WWII.

Wehrmacht Infantry (Barbarossa 1941) No.6105 has five marching infantry wearing the M35/40 *Feldbluse* and equipment for fighting order - virtually an MG-34 team. One man carries the machine-gun over his shoulder, the NCO is armed with an MP-40 with the other two men with Mauser 98k rifles, one of these is carrying two boxes of ammunition for the MG-34 on a special sling. All are bare-headed except the man carrying the machine-gun ammunition who is wearing a side cap. Steel helmets are either carried or slung.

These are archetypal German infantry of the early war period and the four figures can, of course, be 'mixed and matched' to some degree to ring the changes is desired. The only addition needed will be thin metal foil, plastic or paper for the weapon slings. The Ron Volstad illustration on the box top, plus drawings on the back of the box show how it all should look. Handy for posing at a roadside with a vehicle behind to depict an 'on the march' diorama. Lots of parts and super value for around £5.99 for four figures!

Nachtjäger (Berlin 1945) No.6089 is a little fanciful, but who can say whether it really happened or not, with four soldiers in varying forms of dress (late war) equipped with *Sturmgewehr 44*, fitted with infrared sights, curved muzzle attachments. The *2cm Luftfaust* nine-barrel shoulder fired rocket launcher for use against low flying aircraft is also in the kit. This fired adapted 2cm cannon shells and was evaluated by the Allies after the War.

Two of the men have the *StG 44* fitted with *Zielgerät 1229 Vampir* equipment, the man-portable infrared searchlight and telescope sight fitted to the assault rifle. The *Vampir*-fitted *StG 44* was tested after the war, but whether it was actually used in combat by the Germans is another story.

The kneeling figure has the *Vorsatz 'J'* 30° curved barrel attachment on his *StG 44*, used for firing over defence works or around corners aiming via a periscope mirror sight unit. This curved muzzle attachment was also designed to be fitted to German AFVs as a close-in defence weapon, the *Vorsatz 'P'*, but with practically a 90° bend and periscope sight, fitted into a small *kugelblende* (ball mount) usually on the vehicle's upper surface or turret top. This barrel attachment was also threaded to take a rifle grenade launcher! The idea (tested by the Allies) produced only limited results where the bullets of the short 7.92mm round fired by the *StG 44* often distorted or fragmented on exit from the muzzle. These figures will make a good 'what if' diorama with a *Vampir*-equipped *Panther* or half-track. Ron Volstad takes a break from illustrating this set and Vincent Wai produces the box top colour and drawings on the reverse with paint references. Excellent value for around £5.99 a box.

K.M.J.

Prices in text

Dragon Models Ltd., 603-609 Castle Peak Road, Kong Nam Industrial Building, 10/Fl., B-1, Tsuen Wan, New Territories, Hong Kong.

Another new release from Andrea in their scenic accessories range is a kit of cast plaster parts to produce a 54mm Roman Bridge (AS-006) and pretty heftily priced at £29.75 plus £2 postage. Bridges of this type are 'timeless' in what can be depicted crossing them. The parapets on this one are damaged, so something definitely 'post-Roman' is called for with anything from a man or beast to an AFV or a car. It would make a good display base for two or more (or all!) of the new hussars charging across it.

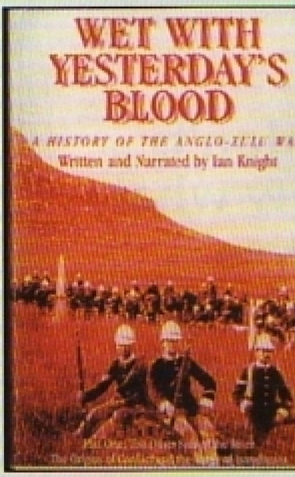
Historex Agents, Wellington House, 157 Snargate Street, Dover, Kent CT17 9BZ stock the Andrea range of figure kits and accessories.

K.M.J.

Prices in text

Andrea Miniatures, Soldier Express S.L., C/Maestro Zudaire s/n, Villalba, 28409 Madrid, Spain.

Mahaweni Ventures


WET WITH YESTERDAY'S BLOOD
A HISTORY OF THE ANGLO-ZULU WAR
Written and Narrated by Ian Knight

An audio tape written and narrated by Ian Knight contains the first part of Wet With Yesterday's Blood, and is titled 'The Other Side of the River'. This is the first part in what will be an audio history of the Anglo-Zulu War.

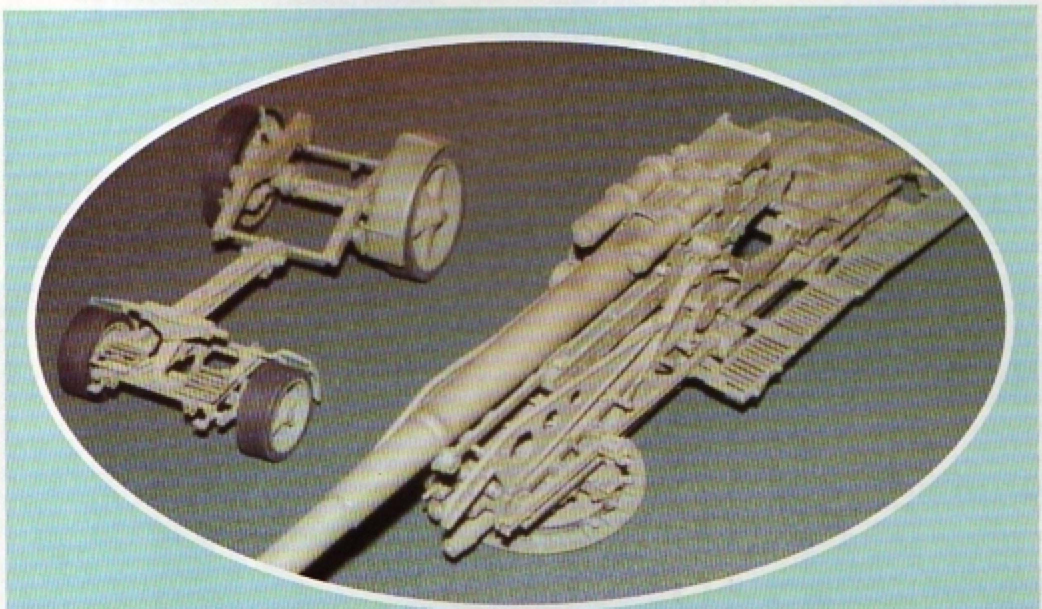
Part one looks at the origins of the Zulu War and takes in the battle of Isandlwana. The tape has original music and sound effects that students of the Zulu War will find adds greatly to the production. It is intended to add further tapes to the series from time to time and No.2 will cover Rorke's Drift. It is competently produced and certainly makes for easy listening.

K.M.J.

Price £9.99 plus £1 p&p

Mahaweni Ventures, PO Box 412, Canterbury, Kent CT2 7GH. Fax: 01227 766422. There is an e-mail address: mahaweni@compuserve.com

Website: http://www.battlefields.co.za/iknight



Precision Models

This is the first model I have seen from Precision Models for a year or so. They have this 'thing' about German heavy artillery and this one is no exception because there are two separate kits here. One is the gun itself, *21cm Kanone 38* (£76.50), which can be built up into the firing position, or if you had the *Protze 21cm K.38* (£23.50) carriage then you can build it in a travelling position.

It is smartly boxed, with a good colour photo of the finished model on top. Impressive is certainly the word in every way and if you want to produce the sort of detailed museum quality exhibit straight from the box then this is it. Cast entirely in polyurethane resin, the box is packed full with poly bags of smaller parts and some larger sections as well. The quality of the castings is simply superb, there was not a casting blemish to be found. The one thing you might have gathered is that there is a lot to this one, so it is not a quick assembly job, and will require some experience of making resin models. However, there are some eight pages of assembly instructions, which include parts diagrams for every piece, and clearly showing where waste resin from the moulding process has to be removed. Provided you do this carefully, and follow the nine assembly stages, then at the end you will have a model that I would defy anyone to improve on. All the stages are clearly illustrated, most having extra detail drawings.

The *Protze* follows all these comments, though it is really just the two axle/wheel fittings. Again though there are plenty of parts and it is very much a kit on its own. Equally, the detail on all the castings is excellent, with moulding plugs put in sensible positions so there is minimal opportunity to damage any important detail in preparing the parts for assembly. Everything you could want in these two boxes to make a mightily impressive artillery piece. I do wonder how they will follow this though!

R.B.

Prices in text

Precision Models, Elf Septemberlaan 24, B-3660 Opglabbeek, Belgium.

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PANZER GRENADIER DIVISION Grossdeutschland
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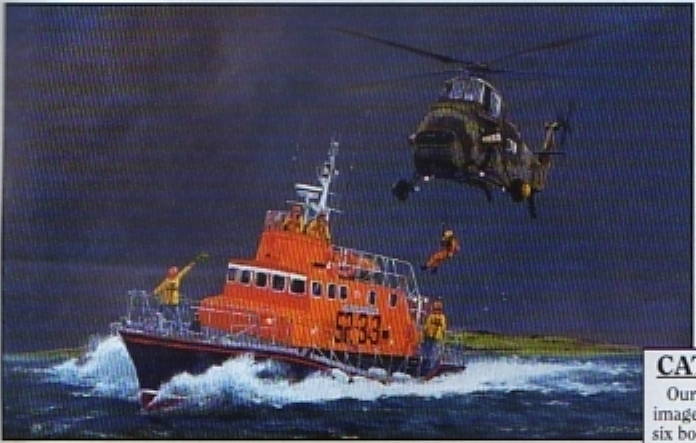

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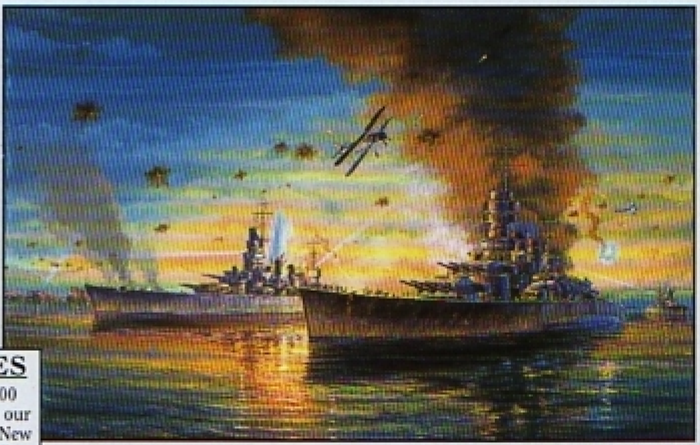

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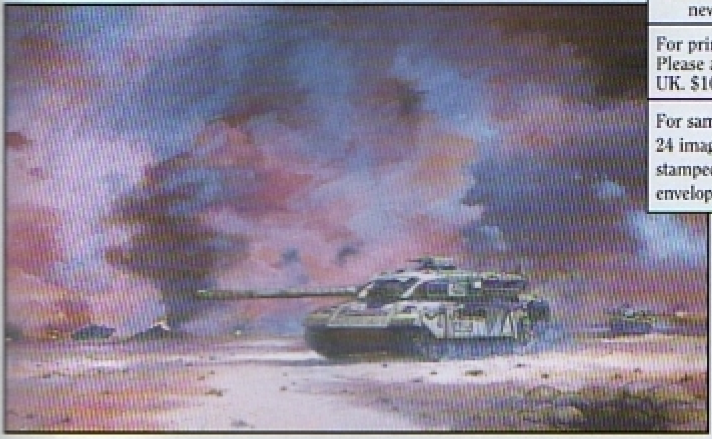

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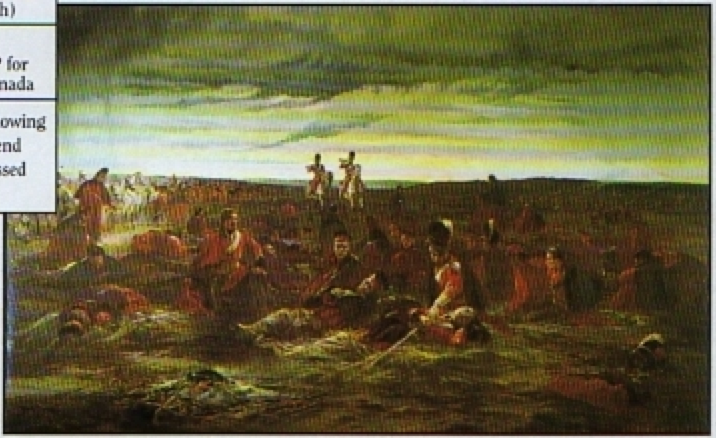

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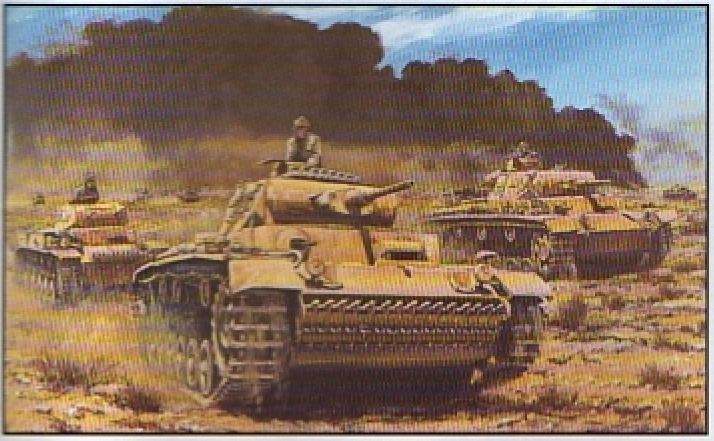

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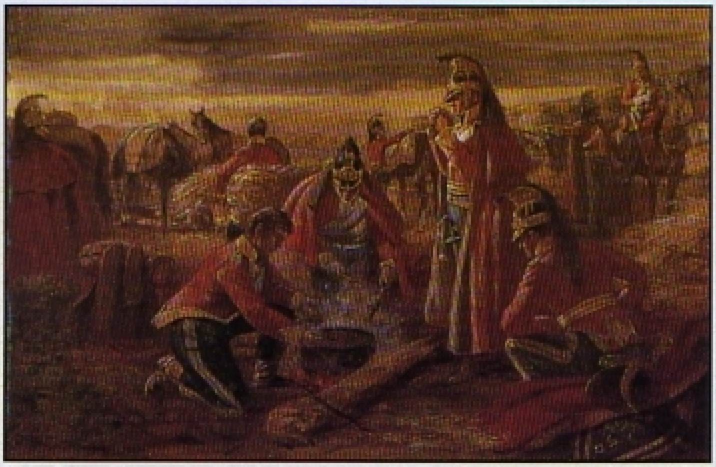

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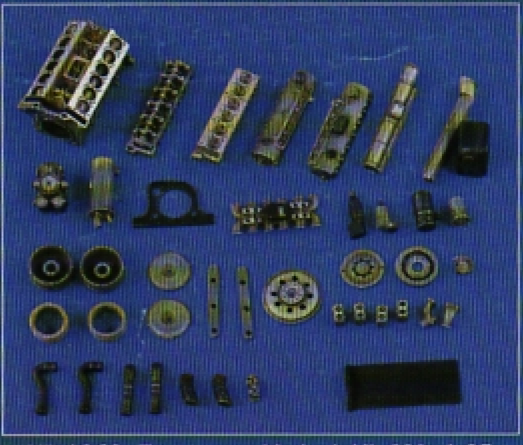

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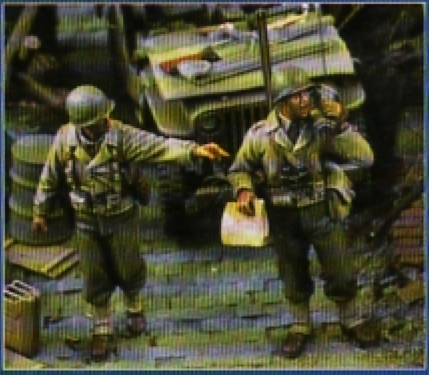

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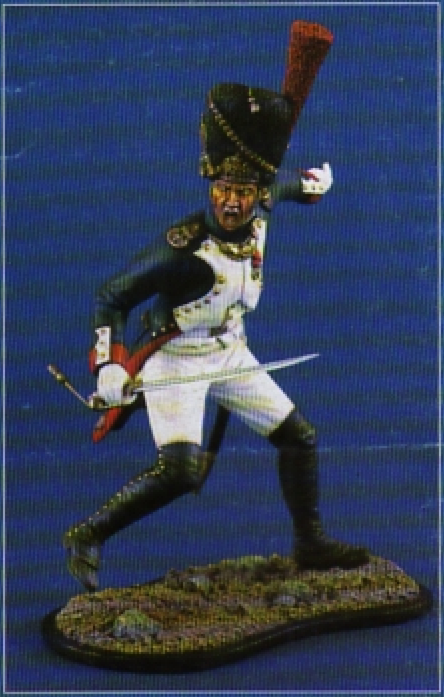

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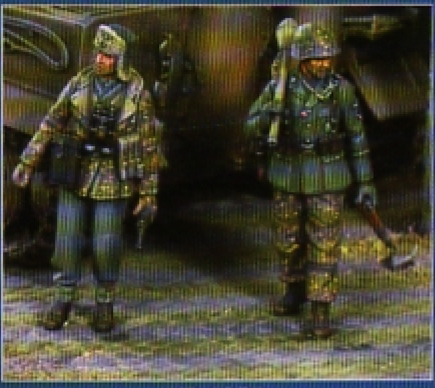

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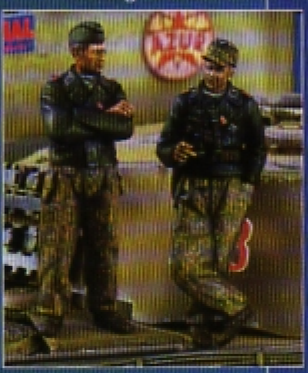

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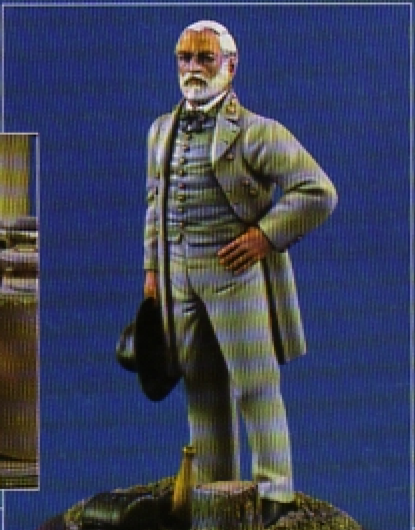

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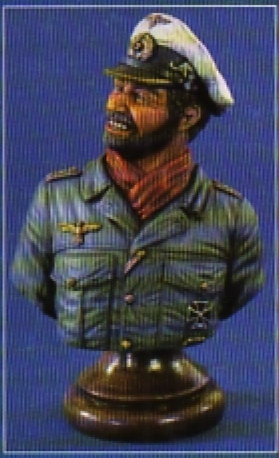

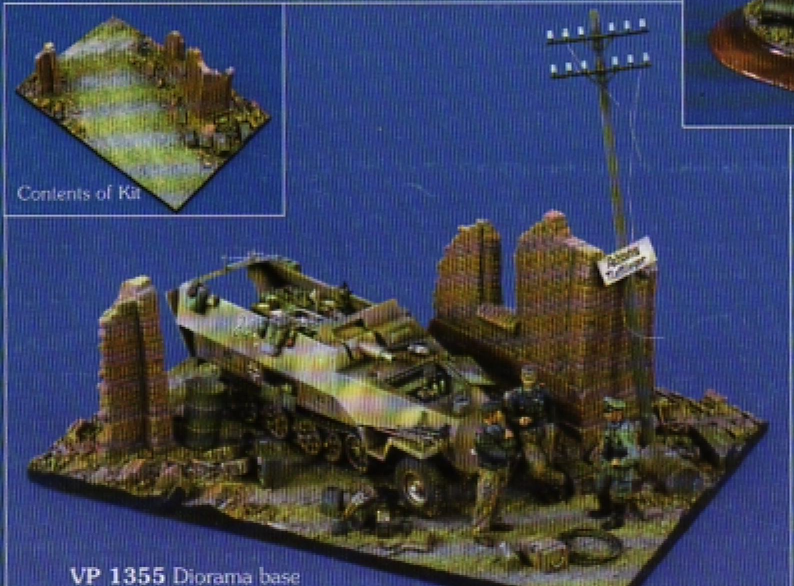

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